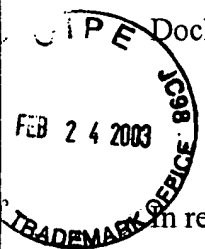


#15
Appeal
Brief
H/H
3/1/03



Docket No. 48347-013

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Olaf Vancura

Serial No. 09/875,753

Filed: June 6, 2001

For: KNOWLEDGE-BASED CASINO GAME AND METHOD THEREFOR

Group Art Unit: 3711

Examiner: W. Pierce

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TRANSMITTAL OF APPEAL BRIEF

Commissioner for Patents
Washington, DC 20231

Sir:

Submitted herewith in triplicate is Appellant(s) Appeal Brief in support of the Notice of Appeal filed August 22, 2002. Please charge the Appeal Brief fee of \$320.00 to Deposit Account 500417.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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TABLE OF CONTENTS

I.	REAL PARTY IN INTEREST	1
II.	RELATED APPEALS AND INTERFERENCES	1
III.	STATUS OF CLAIMS	2
IV.	STATUS OF AMENDMENTS	2
V.	SUMMARY OF THE INVENTION	2
VI.	ISSUE	5
VII.	GROUPING OF CLAIMS	6
VIII.	ARGUMENT	6
IX.	PRAYER FOR RELIEF.....	34
	APPENDIX (APPEALED CLAIMS 1, 3, 8 THROUGH 10, 18, 19, 24, 25 AND 30).....	35

EXHIBIT 1 (Declaration of Olaf Vaccura executed 5/18/01).

EXHIBIT 2 (Declaration of John J. Grochowski executed 4/23/01).

EXHIBIT 3 (Declaration of Fredric E. Gushin executed 5/31/02).

EXHIBIT 4 ("Strictly Slots", October 2002, page 42)

EXHIBIT 5 ("Strictly Slots"/"The Future of Slots", September 2002, page 51).

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#15
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Brief
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Hill

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PATENT

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Group Art Unit: 3711

Examiner: W. Pierce

APPEAL BRIEF

Commissioner for Patents
Washington, DC 20231

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TECHNOLOGY CENTER R3700

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed August 22, 2002.

I. REAL PARTY IN INTEREST

The real party in interest is Mikohn Gaming Corporation.

II. RELATED APPEALS AND INTERFERENCES

This subject matter involved in this Appeal relates to the subject matter involved in U.S. Patent Application Serial No. 09/372,560 (the '560 application). An appeal brief in the '560 application is filed contemporaneously herewith.

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III. STATUS OF CLAIMS

Claims 1, 3, 8 through 10, 18, 19, 24, 25 and 30, all pending claims, have been finally rejected. It is from the final rejection of claims 1, 3, 8 through 10, 18, 19, 24, 25 and 30 that is Appeal is taken.

IV. STATUS OF AMENDMENTS

No Amendment has been filed subsequent to the issuance of the Final Office Action dated June 24, 2002.

V. SUMMARY OF THE INVENTION

The present invention is directed to a method for playing a novel casino game which involves a knowledge-based bonus game (using actual answers from a player) combined with an underlying game of chance (embodiments are provided throughout the written description of the specification, as at page 10, line 14 through page 12, line 28). The player's response is used to precisely control the house advantage within a predetermined range (page 14, lines 5-20 of the written description) for the casino game even against a hypothetical player with perfect knowledge. The predetermined range, as claimed and taught, varies between a maximum house advantage and a minimum house advantage, and can be calculated to accommodate many different casino game designs, such as those appearing in Table I on page 15 of the written description and illustrated throughout the specification.

The designing of a successful knowledge-based bonus game in combination with an underlying game of chance required negotiating and solving two formidable problems:

(1) game must award a player who correctly answers more than an incorrect answer yet ensure the house commercial viability by preventing a perfect knowledge player or a team of players working together from cleaning out or bankrupting the house (page 18 of the written description, lines 5 through 8); and

(2) the game must be fair to a player with no knowledge (such as a player guessing at answers), i.e., the game must not present a prohibitively high house advantage, because players must be encouraged to continue to play even if they are not always correct in their responses (page 17 of the written description, lines 1 through 4).

The present invention addresses and solves the first problem by providing a game which need not be monitored and need not monitor itself, because a set house advantage is established for the perfect player for playing the game (page 11 of the written description, lines 7 through 11, page 17, lines 20 through 24). The second problem is addressed and solved by providing a set house advantage for the player who always guesses at the answer, as provided by random number generator 50 in Fig. 1 and illustrated by the formulas and examples throughout the specification.

The claimed invention provides an instantaneous **house advantage in a predetermined range** between the set limits of the perfect player and the player who always guesses, thereby preventing a perfect player from breaking the house because the house has a statistical house advantage that is preserved over time (page 17 of the written description, lines 20 through 24). However, the player who always guesses is assured a fair return under a second statistical house advantage that is preserved over time.

The concept of a casino game having a knowledge-based bonus game **combined** with an underlying game of chance with a **house advantage within a predetermined range**, as in the claimed invention, is alien to the applied prior art.

For the convenience of the Honorable Board, each of independent claims 1, 19 and 25 is reproduced below. Each independent claim is directed to a method for playing a casino game comprising playing an underlying game of chance **together** with playing a knowledge-based bonus game. In addition, for the convenience of the Honorable Board, Appellants have underlined a portion of each independent claim which specifies that the **house advantage is within a predetermined range for the combined knowledge-based bonus game and underlying game of chance**.

“1. A method for playing a casino game comprising the steps of:
receiving a wager,
playing an underlying game of chance,
playing a knowledge-based bonus game using answers from a
player in combination with the underlying game of chance, the combined
knowledge-based bonus game with the underlying game of chance having a house
advantage within a predetermined range.” (emphasis added)

Claim 19 claims the predetermined range and that one set limit of the predetermined range is based on all answers being correct (i.e., the player with perfect knowledge):

“19. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of:
receiving a wager,
playing the underlying casino game of chance,
stopping play of the underlying casino game of chance,
playing the knowledge-based bonus game when the underlying casino game of chance is stopped, the steps of playing the knowledge-based game at least having the steps of:
(a) providing at least one query to the player in the knowledge-based game,

(b) receiving at least one answer from the player in response to the provided at least one query,

(c) paying the player based upon the at least one answer by the player,

providing a house advantage within a predetermined range for the combined knowledge-based bonus game and underlying casino game, the predetermined range having a set limit based at least upon all answers to all queries in the knowledge-based game are always correct and the wager." (emphasis added)

Independent claim 25 recites a house advantage in a range from a first set limit based on answers all being correct to a second set limit based on answers being guessed at:

"25. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of:

playing the underlying casino game of chance,

playing the knowledge-based bonus game in combination with the underlying game, the steps of playing the knowledge-based game at least having the steps of:

(a) providing at least one query to the player in the knowledge-based game,

(b) receiving at least one answer from the player in response to the provided at least one query,

the combined knowledge-based bonus game with the underlying casino game having a house advantage in a range from a first set limit based on all answers to all queries are correct and a second limit based on all answers to all queries are guessed." (emphasis added)

VI. ISSUES

The Issues Which Arise In This Appeal And Require Resolution By The Honorable Board of Patent Appeals and Interferences (the Board) Are:

1. Whether claims 1, 3, 8 through 10, 18, 19, 24, 25 and 40 are unpatentable under the first paragraph of 35 U.S.C. §112 for lack of adequate descriptive support;

2. Whether claims 1, 3, 8, 9 and 18 are unpatentable under the second paragraph of

35 U.S.C. §112 for failing to particularly point out and distinctly claim the subject matter Appellant regards as his invention;

3. Whether claims 1, 3 and 18 are unpatentable under 35 U.S.C. §102 for lack of novelty as evidenced by each of U.S. Patent No. 5,718,429 (Keller) and U.K. Patent Application 2,197,974 (Evans); and

4. Whether claims 8 through 10, 19, 24, 25 and 30 are unpatentable under 35 U.S.C. §103 for obviousness predicated upon each of Keller and Evans in view of U.S. Patent No. 5,178,545 (Thompson).

VII. GROUPING OF CLAIMS

The appealed claims do not stand or fall together as a group. Appellant separately argues the patentability of claims 1, 3, 8, 10 and 18 as a group (Group I). Appellant further separately argues the patentability of each of: claim 9; claims 19 and 24 as a group (Group II); and claims 25 and 30 as a group (Group III).

VIII. THE ARGUMENT

1. The rejection under the first paragraph of 35 U.S.C. §112 for lack of adequate descriptive support.

Due Process of Law

The statement of the rejection under the first paragraph of 35 U.S.C. §112 appearing in the June 24, 2002 Final Office Action is conspicuous by the lack of any mention of the word "enable" or "enablement". Rather, the Examiner asserts that the claimed subject matter is not described in the specification to reasonably convey to one having ordinary skill in the art that

Appellant had possession of the claimed invention at the time the application was filed. Thus, Appellant is interpreting the imposed rejection under the first paragraph of 35 U.S.C. §112 as based upon a perceived lack of adequate **descriptive** support.

However, the very same statement of the rejection appearing in the June 24, 2002 Final Office Action incorporates the reasoning set forth in a previous Office Action which, according to the paragraph bridging pages 2 and 3 of the November 6, 2001 Office Action, is predicated upon lack of **enablement**. Appellant, therefore, has **not** been apprised of the **precise** reason **why** patentability is denied under the first paragraph of 35 U.S.C. §112. Such a failure to apprise Appellant of the basis for the rejection **violates Appellant's right to due process of law**. *In re Frilette*, 423 F.2d 1397, 165 USPQ 259 (CCPA 1970); *In re Borkowski*, 422 F.2d 904, 164 USPQ 642 (CCPA 1970). On this basis alone, the imposed rejection should be reversed.

Appellant is now forced into the unenviable position of **guessing** as to the precise basis for the rejection under the first paragraph of 35 U.S.C. §112 or expending resources to confront both a rejection for lack of adequate descriptive support and for lack of adequate enabling support. Such an unenviable position is exacerbated by the fact that the Examiner has failed to discharge the initial burden of establishing a prima facie basis to deny patentability to the claimed invention under the first paragraph of 35 U.S.C. §112 for either lack of adequate descriptive support or for lack of adequate enabling support, as set forth infra.

The Examiner's Burden

The Examiner is charged with the initial burden of establishing a prima facie basis to deny patentability to a claimed invention under any statutory provision. *In re Mayne*, 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997); *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed.

Cir. 1992). Assuming the rejection under the first paragraph of 35 U.S.C. §112 is predicated upon a perceived lack of adequate descriptive support, Appellant submits that the Examiner did not discharge the initial burden by merely questioning the scope of the claimed invention and declining "....to engage in a study of the word "'combination'" (paragraph bridging pages 2 and 3 of the July 24, 2002 Final Office Action).

It is fundamental that claims must be interpreted through the eyes of one having ordinary skill in the art in light of and consistent with the written description of the specification. *In re Cortright*, 165 F.3d 1353, 49 USPQ2d 1464 (Fed. Cir. 1999); *Miles Laboratories, Inc. v. Shandon, Inc.*, 997 F.2d 870, 27 USPQ2d 1123 (Fed. Cir. 1993). In rejecting a claim under the first paragraph of 35 U.S.C. §112 for lack of adequate descriptive support, the Examiner is charged with the initial burden of establishing that one having ordinary skill in the art would not have **reasonably recognized** from the originally filed disclosure that Appellant invented the now claimed subject matter. *In re Wertheim*, 541 F.2d 257 191 USPQ 90 (CCPA 1976). That burden is not discharged by merely asserting a lack of ipsis verbis support in the specification for claim language. *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858 26 USPQ2d 767 (CAFC 1993). Rather, the issue generated by a rejection under the first paragraph of 35 U.S.C. §112 for lack of adequate descriptive support is whether the **concept** embodied in a claim was originally disclosed. *In re Anderson*, 471 F.2d 1237, 176 USPQ 331 (CCPA 1973). It has been repeatedly held that the written description requirement does **not** require an Appellant to describe **exactly** the subject matter claimed. Rather, the disclosure should be sufficient to allow one having ordinary skill in the art to recognize that Applicant invented what is now claimed. *Union Oil Co. of California v. Atlantic Richfield Co.*, ___F.3d___, 54 USPQ2d 1227 (Fed. Cir. 2000); *In re Gosteli* 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989).

In applying the above legal tenets to the exigencies of this case, Appellant submits that the Examiner did not establish a prima facie basis to deny patentability to the claimed invention under the first paragraph of 35 U.S.C. §112 for lack of adequate descriptive support. Specifically, the Examiner asserts that the claim requirement for "using the answers from a player in combination of the underlying game of chance" is not disclosed in the specification (paragraph bridging pages 2 and 3 of the June 24, 2002 Final Office Action). That expression appears only in independent claim 1 (Group I).

The Examiner's regrettable dissection of a manipulative step of the claimed invention is misleading and clearly legally erroneous. Specifically, claim 1 is directed to a method comprising a sequence of manipulative steps which includes the step of receiving a wager, the step of playing an underlying game of chance, and:

playing a knowledge-based bonus game using answers from a player **in combination** with the underlying game of chance, the **combined** knowledge-based bonus game with the underlying game of chance having a **house advantage within a predetermined range**.

Any interpretation of the claimed invention to require using answers from a knowledge-based bonus game to somehow implement a game of chance is devoid of any basis in the specification or in reality, and certainly is not how one having ordinary skill in the art would have interpreted the claimed invention. Indeed, even without resorting to the specification, the **plain language** of claim 1 states the knowledge-based game is played using answers from a player. The claimed method is a combined knowledge-based bonus game with an underlying game of chance. Thus it is the knowledge based bonus game, which is played using answers from a player, that is played in combination with the underlying game of chance. *In re Cortright, supra; Miles Laboratories, Inc. v. Shandon, Inc., supra.*

The Examiner's admitted disinclination to interpret the word "combination" through the eyes of one having ordinary skill in the art in a manner reasonably consistent with the written description of the supporting specification is **legally erroneous** because it flies in the face of the judicial standard. *In re Cortright, supra*. The Examiner can not properly eradicate the language "playing a knowledge-based bonus game" from the claim as though it did not exist, and then assert that the specification does not provide adequate descriptive support for the butchered remains "using the answers from a player in combination with the underlying game of chance."

Thus, even without consulting the written description of the specification, the Examiner's interpretation of the claimed invention is, on its face, unreasonable and **clearly legally erroneous**.

Moreover, the Examiner's interpretation of the claimed invention is **clearly inconsistent and conflicts** with the written description of the specification, wherein it is made abundantly clear that it is the knowledge based bonus game that is played with answers and used in combination with the underlying game of chance. For example, Appellant would refer to Fig. 2 and the related discussion thereof in the written description of the specification, notably steps 222 and 224 and the discussion at page 38, line 25 through page 39, line 19. Indeed, throughout the written description of the specification examples are provided wherein answers are received from players in the bonus game (see, for example, FAMILY FEUD, commencing at page 23, line 24).

Appellant further takes issue with the penultimate sentence in the paragraph bridging pages 2 and 3 of the June 24, 2002 Final Office Action which reads as follows:

The specification describes the basic game and the secondary game as being "separate."

The Examiner's assertion is misleading. It is possible to view most steps of a method claim as separate, .e.g., as separate manipulative steps. Words can also be viewed as separate letters, thereby depriving the words of meaning, as the Examiner would deprive the claimed method of its meaning. The Examiner's unjustified dissection ignores the fact that the claim is directed to a method comprising a sequence of manipulative steps which include **playing a knowledge-based bonus game in combination with an underlying game of chance**. Further, had the Examiner attempted to interpret the claimed invention reasonably in light of and consistent with the written description of the specification, as judicially required, the Examiner would have noted, inter alia, line 22 depicted in Fig. 1 which schematically illustrates delivery of the bonus condition which forms the casino game in which the separate method steps of Group I are performed (page 20 of the written description, lines 14 through 18). Had the Examiner consulted the specification he may have further noted that the bonus game can be implemented into the underlying game of chance, as disclosed at page 22 of the written description, lines 25 through 28.

Appellant would emphasize that even without consulting the written description of the specification, the plain claim language of claim 1 specifies a method for playing a **casino game** and comprises the manipulative steps of receiving a wager, playing an underlying game of chance and playing a bonus game using answers from a player. Claim 1 further recites that playing of the knowledge-based bonus game is conducted in **combination** with the underlying game of chance and that the **combined two games** have a house advantage **within a predetermined range**. It is difficult to conceive of one having ordinary skill in the art who would not have recognized that Appellant invented what is now claimed, particularly when reasonably interpreted in light of and in consistent with the written description of the

specification. *In re Cortright, supra; Miles Laboratories, Inc. v. Shandon, Inc., supra.*

The Disclosure is Enabling

To whatever extent the imposed rejection may have been intended to be predicated upon the first paragraph of 35 U.S.C. §112 for lack of adequate enabling support, or to whatever extent the Examiner may have intended to include such a rejection for lack of adequate enabling support, Appellant would submit that the Examiner did not discharge the initial burden. Specifically, lack of enablement under the first paragraph of 35 U.S.C. § 112 is a **question of law**. *U.S. Steel Corp. v. Philips Petroleum Co.*, 865 F.2d 1247, 9 USPQ2D 1461 (Fed. Cir. 1989); *U.S. v. Telectronics Inc.*, 857 F.2d 778, 8 USPQ2d 1217 (Fed. Cir. 1988). In rejecting a claim under the first paragraph of 35 U.S.C. § 112 for lack of adequate enabling support, it is incumbent upon the Examiner to establish a basis in fact and/or cogent technical reasoning to support the legal conclusion that one having ordinary skill in the art would not be able to practice the claimed invention, armed with the supporting specification, without undue experimentation. *In re Brana*, 51 F.3d 1560, 34 USPQ2d 1436 (Fed. Cir. 1995); *In re Marzocchi*, 439 F.2d 220, 169 USPQ 367 (CCPA 1971). It must be borne in mind that a patent disclosure is directed to one having ordinary skill in the art. *In re Howarth*, 654 F.2d 103, 210USPQ 689 (CCPA 1981). Moreover, the scope of enablement varies inversely with the degree of predictability in the art, i.e., enablement is a function of the complexity of the involved subject matter. *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 15 USPQ2d 1321 (Fed. Cir. 1990); *U.S. v. Telectronics Inc., supra*. Appellant would stress that a patent specification is **presumed enabling** in the absence of a reason to doubt the objective truth of the statements contained herein. *In re Brana, supra; In re Marzocchi, supra.*

In applying the above legal tenets to the exigencies of this case, Appellant submits that the Examiner **has not even attempted** to establish a *prima facie* basis to deny patentability to the claimed invention under the first paragraph of 35 U.S.C. § 112 for lack of adequate enabling support. Specifically, while asserting lack of enablement in the November 6, 2001 Office Action, the Examiner merely offered the following rationale appearing at page 3, lines 2 through 7:

It is stated that, "In the specification, the game of chance is played "separately" from the bonus game and is not played in "combination" which implies the games are played simultaneously. The claim merely calls for "playing the knowledge-based bonus game in combination with the bonus game". The scope of the claim implies that the claims are played at the same time and not sequentially after one another **as disclosed**. Note Fig. 2 where the flow chart shows the steps of the method to go from "play underlying casino game", "stop play" and then to "play knowledge-based bonus game". This is a scope of claim problem. (Emphasis supplied).

With all due respect, the Examiner's reasoning does not withstand scrutiny, defies logic and certainly does not rise to the level of establishing a *prima facie* basis to overcome the **legal presumption** that the claims are enabled by the disclosure. *In re Brana, supra*; *In re Marzocchi, supra*. As far as the separate playing of the game of chance and bonus game, the Examiner ignores the fact that the claimed invention is directed to a **casino game** which comprises manipulative steps including playing an underlying game of chance **and** playing a knowledge-based bonus game, wherein the **combined** knowledge-based bonus game with the underlying game of chance has a house advantage with a predetermined range. The notion that the claim requires the different games to be played at the same time is, **in the Examiner's own words, inconsistent with the sequential performance of such games as disclosed**. In other words, the Examiner **admits** he is interpreting the claimed invention in a manner **inconsistent** with the

disclosure. **Thus, the Examiner admits legal error in his claim interpretation.**

The statement "This is a scope of claim problem" is an unsupported conclusion, which is not articulated with sufficient clarity to justify imposing a rejection under the first paragraph of 35 U.S.C. §112 for lack of adequate enabling support, or under any other statutory provision.

Conclusion

It should, therefore, be apparent that the Examiner has failed to establish a prima facie basis to deny patentability to the invention encompassed by Group I under the first paragraph of 35 U.S.C. §112 for lack of adequate descriptive support and/or for lack of adequate enabling support. Nor has the Examiner established a prima facie basis to deny patentability to **claim 9** or the claims of **Groups II and Groups III**.

Specifically, the Examiner has not separately addressed claim 9 or the claims of Groups II and III. However, Appellant separately advocates the patentability of claim 9 and each of Groups II and III. The Examiner's failure to separately address claim 9 and the claims of Groups II and III is a sufficient basis upon which to reverse the rejection of such claims, since Appellant is not obliged to offer any rebuttal until such time as the Examiner has attempted to establish a prima facie case with respect to claim 9 and the claims of Groups II and III. *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 7 USPQ2d 1222 (Fed. Cir. 1988).

At any rate, Appellant would submit that the claims of Groups II and III do not employ the term "combination" nor employ the language "playing a knowledge-based bonus game using answers from a player in combination with the underlying game of chance...." which the

Examiner has dissected to establish a phantom basis for the imposed rejection of the claims of Group I. In short, the Examiner has not even attempted to explain **why** one having ordinary skill in the art would not have recognized that Appellant invented the subject matter encompassed by the claims of Groups II and III. Nor has the Examiner even attempted to establish why one having ordinary skill in the art would not have been able to practice the inventions encompassed by the claims of Groups II and III, without undue experimentation. Appellant, therefore, submits that the Examiner's rejection of the claims of Groups II and III under the first paragraph of 35 U.S.C. §112 for any reason is legally erroneous.

2. The Rejection of claims 1, 3, 8, 9 and 18 under the second paragraph of 35 U.S.C. §112.

In the statement of the rejection appearing on page 2 of the June 24, 2002 Final Office Action, the Examiner incorporated the reasoning from the previous Office Action of November 6, 2001, wherein the Examiner, in the first full paragraph on page 3 thereof, asserted:

In claim 1, in line with the rejection of under 1st paragraph set forth above, the scope of the term "playing.... in combination" recited in claim 1 is not clear. As set forth above, this is a scope of claim problem. It leaves the claim inferential and unclear since the steps required to play these games "in combination" are not recited.

Appellant submits that the Examiner's rejection is legally erroneous and that the only thing indefinite is the Examiner's attempted articulation of the rejection.

Indefiniteness under the second paragraph of 35 U.S.C. §112 is a **question of law**. *Zoltek Corp. v. United States*, 48 Fed. Cl. 290, 57 USPQ2d (Fed. Cl. 2000); *Personalized Media Communications LLC v. U.S. International Trade* 161 F.3d 696, 48 USPQ2d 1880 (Fed. Cir. 1998); *Tillotson Ltd. v. Walbro Corp.*, 831 F.2d 1033, 4 USPQ2d 1450 (Fed. Cir. 1987);

Orthokinetics Inc. v. Safety Travel Chairs Inc., 806 F.2d 1565, 1 USPQ2d 1081 (Fed. Cir. 1986).

Accordingly, in rejecting a claim under the second paragraph of 35 U.S.C. §112, the Examiner must provide a basis and fact and/or cogent technical reasoning to support the ultimate legal conclusion that **one having ordinary skill in the art**, with the supporting specification in hand, would not be able to reasonably ascertain the scope or protection defined by a claim. *In re Okuzawa*, 537 F.2d 545, 190 USPQ 464 (CCPA 1976). Significantly, consistent judicial precedent holds that **reasonable** precision in light of the particular subject matter involved is all that is required by the second paragraph of 35 U.S.C. §112. *Zoltek Corp. v. United States*, *supra*; *Miles Laboratoires, Inc. v. Shandon, Inc.* *supra*; *North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 28 USPQ2d 1333 (Fed. Cir. 1993); *U.S. v. Telectronics Inc.*, 857 F.2d 778, 8 USPQ2d 1217 (Fed. Cir. 1988); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986). Appellant would again stress that claims must be interpreted through the eyes of one having ordinary skill in the art in light of and **consistent with** the supporting specification. *Zoltek Corp. v. United States*, *supra*; *Miles Laboratoires, Inc. v. Shandon, Inc.* *supra*;

In applying the above legal tenets to the exigencies of this case, Appellant submits that the Examiner did not discharge the initial burden of providing a basis in fact and/or cogent technical reasoning to support the ultimate legal conclusion that one having ordinary skill in the art would not be able to ascertain the scope of protection defined by any of the rejected claims, particularly when reasonably interpreted in light of and consistent with the written description of the specification. Indeed, one having ordinary skill in the art would have no difficulty understanding the scope of the claimed invention.

Specifically, based upon the above quoted Examiner's exposition of the imposed

rejection, it would appear the Examiner is of the opinion that the use of the term "combination" renders the claimed subject matter indefinite. However, the Examiner has failed to **explain why** one having ordinary skill in the art would not be able understand the scope of the claimed invention from the very language of claim 1, let alone when reasonably interpreted in light of and consistent with the written description of the specification. As previously advocated in traversing the Examiner's rejection under the first paragraph of 35 U.S.C. §112, the invention defined independent claim 1 is directed to a method of playing a casino game, which method comprises a sequence of manipulative steps, including receiving a wager, playing an underlying game of chance, and then playing a knowledge-based bonus game in combination with the underlying game of chance "...the combined knowledge-base bonus game with the underlying game of chance having a house advantage within a predetermined range." It is **not** apparent and the Examiner has **not explained why** one having ordinary skill in the art would have been confused as to the scope of the claimed invention. Moreover, upon consulting the written description of the specification, for example Fig. 2 and the related discussion thereof in the written description of the specification, notably at page 38, line 25, page 29, line 19, one having ordinary skill in the art would recognize that the claimed method involves playing a game of chance in **combination** with the knowledge-based bonus game.

As to the asserted "scope of claim" problem, such as yet to be articulated and explained by the Examiner in the context of a rejection under the second paragraph of 35 U.S.C. §112. *Scripps Clinic & Research Foundation v. Genetech Inc.*, 927 F.2d 1565, 18 USPQ2d 1001 (Fed. Cir. 1991); *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971).

Based upon the foregoing, Appellant submits that the Examiner failed to establish a

prima facie basis to deny patentability to the claims 1, 3, 8, 9 and 18 under the second paragraph of 35 U.S.C. §112. Appellant would note that the claims of Groups II and III have not been rejected under the second paragraph of 35 U.S.C. §112.

3. The Rejection of claims 1, 3 and 18 under 35 U.S.C. §102 for lack of novelty as evidenced by each of Keller and Evans.

In the statement of the rejection, the Examiner asserted that each of Keller and Evans discloses a method corresponding to that claimed, asserting that the recited house advantage is inherent while at the same time being a matter of choice. Appellant strenuously disagrees and notes that this rejection applies only to Group I claims and not to the claims of Groups II and III.

The **factual determination** of lack of novelty under 35 U.S.C. §102 requires the **identical** disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the recognized possession of one having ordinary skill in the art. *Elan Pharmaceuticals, Inc. v. Mayo Foundation*, __F.3d__, 64 USPQ2d 1292 (Fed. Cir. 2002); *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002). Further, in imposing a rejection under 35 U.S.C. §102, the Examiner is required to **specifically identify** wherein an applied reference is asserted to identically disclose **each** feature of the claimed invention. *In re Rijckaert, supra*. Appellant submits that the Examiner has not discharged the initial burden, and there are significant differences between the claimed inventions and the method disclosed in each of the applied references that scotch the factual determination that either of the applied references identically describes the claimed invention within the meaning of 35 U.S.C. §102.

Independent Claim 1

The invention defined in independent claim 1 is directed to a method of playing a casino game, which method comprising a sequence of manipulative steps which include receiving a wager, playing an underlying game of chance, and then:

playing a knowledge-base bonus game using answers from a player in combination with the underlying game of chance, the combined knowledge-based bonus game with the underlying game of chance having a house advantage within a predetermined range.

By its own terms, claim 1 recites more than a game with a particular house advantage. Rather, the claimed method requires playing a combination casino game such that the **combined game** has a house advantage within a **predetermined range**. Neither of the applied references discloses, suggests or inherently entails a method corresponding to that defined in independent claim 1, particularly a method of playing a **knowledge-based bonus game combined with an underlying game of chance, the combination having a house advantage within a predetermined range**.

Indeed, the Examiner has **not** pointed out wherein either of the applied references discloses or suggests a recited house advantage to begin with, much less a house advantage based upon a **combined knowledge-based bonus game and the underlying game of chance**, let alone **within a predetermined range** as recited in claim 1. Rather, the Examiner retreats to the doctrine of inherency. The Examiner's reliance upon inherency is factually and legally erroneous.

In order to rely upon the doctrine of inherency, it is incumbent upon the Examiner to point to a **factual basis** upon which to predicate the determination that the allegedly inherent feature, in this case - the combined knowledge-based bonus game with the underlying game of

chance having a house advantage within a **predetermined range** is necessarily present in the applied prior art and would have been recognized by one having ordinary skill in the art. *Elan Pharmaceuticals, Inc. v. Mayo Foundation, supra*; *Crown Operations International Ltd. v. Solutia Inc., supra*; *Finnegan Corp. v. ITC*, 180 F.3d 1354, 51 USPQ2d 1001 (Fed. Cir. 1999); *In re Robertson*, 169 F.3d 743, 49 USPQ2d 1949 (Fed. Cir. 1999). But, there is a big difference between **saying** a feature is inherent in the prior art and providing a **factual basis** to support that assertion. The Examiner has merely alleged the inherency of a house advantage within a predetermined range based upon the combined knowledge-based bonus game with the underlying game of chance, but **no facts** have been provided to establish that such a house advantage is necessarily present in the applied references and would have been recognized by one having ordinary skill in the art, as judicially required.

Violation of Due Process of Law

The Examiner's exposition of the imposed rejection under 35 U.S.C. §102 bears no relation to making a factual finding that each of the applied references identically described each feature of the claimed invention. *In re Rijckaert, supra*. Rather, having dug in on a simplistic approach that games of chance inherently have a **certain** house advantage, the Examiner leaps to a "house advantage within a predetermined range" by darting among several unapplied references, invoking "common knowledge and common sense" and then adopting a position that is completely **inconsistent** with a factual determination of lack of novelty by relying upon the ability of one having ordinary skill in the art "to determine that house percentage or design the game for a specific house advantage or range" (paragraph bridging pages 3 and 4 of the June 24, 2002 Final Office Action). Appellant is again improperly left in the dark as to statutory basis for

the imposed rejection, i.e., whether it is under 35 U.S.C. §102 for lack of novelty or 35 U.S.C. §103 for obviousness. The Examiner's approach simply denies Appellant his right under due process of law of being reasonably apprised of the statutory basis under which patentability is denied. *In re Mullin*, 481 F.2d 1333, 179 USPQ 97 (CCPA 1973).

Moreover, Appellant would respectfully submit that the necessity for the Examiner to bootstrap into the rejection uncited references and theories of routine skill and determination, common knowledge and common sense, undermines the factual determination of lack of novelty under 35 U.S.C. §102 as well as undermining the inherency theory.

Keller

Keller does not disclose, suggest or enable the claimed method, particularly the manipulative step of "playing a knowledge-based bonus game...in combination with the underlying game of chance, the combined knowledge-based game with the underlying game of chance having a house advantage within a predetermined range."

Keller addresses the problem of local government restrictions on awarding cash prizes based on success within a game of chance (Col. 1:27-29). Keller solves this problem "by refraining from the award of cash prizes for success in a game of chance" (Col. 1:37-38). Instead, Keller awards, based on chance, a **token** that merely **allows** a winner to enter a skill game. Of particular interest is Keller's disclosure that a player will be rewarded for the game-of-chance in such a manner so as to **not** be able to use his or her winnings to pay for continued participation in the casino game (Col. 2:38-41 and Col. 3:4-7). These teachings of Keller are **contrary** to the operation of and, hence, **teach away from** the present invention in a number

ways.

According to Keller's method, the player must pay a fee to obtain chips which are used to play the game of chance. The player is given a token to enter a game of skill **only** upon **successful** completion of the game of chance. The bifurcated arcade game of Keller is **not** a casino game being played to have a "house advantage within a **predetermined range**". In contradistinction to Keller's method, the claimed invention ensures a house advantage is attained within a **predetermined range**. Keller is silent on house advantage (as commonly used in gaming). In Keller presumably the fee is how the operator makes a profit. This is not a house advantage in conventional gaming. **House** advantage is how the **casino** operator makes a profit in gaming. **The claimed invention** is via the self-contained method of play for the game, a true casino game wherein wagers are made and resolved with money or their equivalent, unlike Keller who's solution is to charge an external fee.

Also, within the present invention, the term "house advantage" is used in accordance with the industry accepted meaning that "the house advantage" is a statistical value that reflects the behavior of a game over an extended period of time and relies on continued play and a large number of wagers (page 12, of the written description, lines 9-19)¹. Thus, a bifurcated arcade game such as that taught by Keller, which is not designed for the payout to fund the player's continued participation in the game (and thus provides no encouragement for the player to continue playing without, presumably, paying an additional fee), is uninterested (and silent!) in any particular house advantage as meant within the present claims and, in particular, is not a

¹ Again, it is axiomatic that claims are interpreted through the eyes of one having ordinary skill in the art in light of and consistent with the written description of the specification. *In re Cortright, supra*.

combined casino game having a house advantage within a predetermined range.

The bottom line is that Keller does **not** disclose a house advantage.² Rather, "the person conducting the entertainment may, but need not, require the individuals participating to compensate him or her for the services provided" (Col. 2:1-3). Furthermore, Keller refers to money being collected and/or participants paying a price (Col. 2:7-9), a manner of making money not associated with a traditional casino game. Keller carefully points out (Col. 2:32-42 and Col. 3:1-7) that the disclosed entertainment casino game is not a traditional casino game as his winners are awarded tokens of **no redeemable value**. The player then proceeds to use the tokens that are won to play any one of many separate games of skill (selected by the player). Keller discloses a casino game for entertainment purposes only and, in this regard, **teaches away** from the present invention.

Whatever "odds" may nor may exist in the random game contemplated by Keller, is confined to that game wherein a token is issued, which token may be employed to play the knowledge-based game. **There is no "house advantage within a predetermined range."** Indeed, the underlying game of chance is provided solely for its entertainment value in order to avoid running afoul of governmental restrictions on avoiding a cash prize in a game of chance. Clearly, Keller does not disclose, suggest, or inherently involve a casino game wherein a house advantage in a **predetermined range** is established for **the combined knowledge-based bonus game with the underlying game of chance**.

Further, Appellant would submit that one having ordinary skill in the art would **not** have **recognized** that Keller's two part casino game inherently, i.e., necessarily involves a "house advantage within a predetermined range" predicated upon the combined knowledge-based bonus

² Exhibit 1, paragraph 9.

game with the underlying game of chance, as judicially required. *Elan Pharmaceuticals, Inc. v. Mayo Foundation, supra*; *Crown Operations International Ltd. v. Solutia Inc., supra*; *Finnegan Corp. v. ITC, supra*; *In re Robertson, supra*.

Evans

Evans discloses coin or token feed machine comprising a random or quasi random prize generator portion which provides visible representation indicative of the prize to be awarded upon successful completion of the game of skill. The Examiner does **not** point out wherein Evans discloses a method as defined in independent claim 1, which comprises the manipulative steps of receiving a wager, playing an underlying game of chance, and then playing a knowledge-based bonus game in combination with the underlying game of chance, wherein the **combined knowledge-based bonus game with the underlying game of chance having the house advantage within a predetermined range**. The Examiner again falls back on inherency although the Examiner apparently admits a fact inconsistent with the determination of inherency, i.e., that Evans does not provide a casino game "maintaining acceptable profits to the house in the presence of knowledgeable players" (page 5 of the June 24, 2002 Final Office Action, lines 14 and 15). But, the method defined in claim 1 maintains the house advantage in a **predetermined range**, even against the hypothetical perfect knowledge player. As previously argued in traversing the imposed rejection under 35 U.S.C. §102 for lack of novelty as evidenced by Keller, inherency requires a certainty and art-recognition. *Elan Pharmaceuticals, Inc. v. Mayo Foundation, supra*; *Crown Operations International Ltd. v. Solutia Inc., supra*; *Finnegan Corp. v. ITC, supra*; *In re Robertson, supra*. The expert testimony of record discussed *infra* coupled with the Examiner's admission effectively undermines the Examiner's reliance upon the doctrine

of inherency.

The Examiner mentions (at page 3 of the June 24, 2002 Final Office Action, lines 15-19) PGPUB 2002/0039918 (Anderson), U.S. Patent 5,848,292 (believed to be U.S. Patent 5,848,392 and hereinafter termed ("the '392 Patent") and U.S. Patent No. 6,033,307 (The '307 Patent), **tacitly acknowledging** the shortcomings of Keller and Evans. Not one of these **improperly** cited references³ cure the argued deficiencies of the **allegedly anticipatory** references to Keller and Evans. Anderson, filed well after the instant application, teaches that a player cannot actually answer as the invention must preserve randomness (paragraph 28). The '392 Patent, like Anderson, only discloses an underlying game of chance (slots) with a bonus game of chance (rotating wheel). Both casino games provide outcomes based solely on randomness and would have a calculated house advantage. No skill or knowledge is required of the player. The '307 patent to Appellant discloses a system wherein both games are also based on random outcomes. None of these improperly discussed references discloses, suggests or inherently involves a knowledge-based bonus game using answers from players with a predetermined range for the house advantage for the combined two games.

Additional Theories of the Examiner

The Examiner believes "that the mathematics of each game are considered synergistic" (page 3 of the June 24, 2002 Final Office Action, line 19). This statement by the Examiner is inconsistent with his inherency assertion. Indeed, the novel mathematical approach of the present invention providing a **house advantage wherein a predetermined range** is truly

³ *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970)

synergistic for a wide range of different casino games having a knowledge-based bonus game that preserves the house advantage in that range. Many examples of knowledge-based bonus games and predetermined ranges are disclosed in the specification. Game designers can advantageously make individual game design decision concerning the predetermined range such as found in reference to Table I on page 15 of the specification.

It is respectfully submitted the remaining statements in the Final Office Action concerning the predetermined range of the house advantage constitute "a retrospective view of inherency" based on hindsight. *In re Newell*, 13 USPQ2d 1248, 1250 (Fed. Cir. 1989). The Federal Circuit in *Continental Can Co USA Inc. v. Mondanto Co.*, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991), has stated:

"To serve as anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that is would be so recognized by persons or ordinary skill."

Appellant, therefore, submits that the imposed rejection of claims 1, 3, and 18 in Group I under 35 U.S.C. §102 for lack of novelty as evidenced by each of Keller and Evans is not factually or legally viable, noting that this rejection does not apply to Groups II and III.

4. The Rejection of Claims 8 through 10, 19, 24, 25 and 30 under 35 U.S.C. §103 for Obviousness Predicated Upon Each of Keller and Evans in View of Thompson.

In the statement of the rejection, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the method disclosed in each of Keller and Evans by providing random stopping of the game of chance in view of Thompson. The Examiner

further asserted that setting the house advantage is, as set forth in the claims, "...are obvious matters of design choice (paragraph bridging pages 4 and 5 of the November 6, 2001 Office Action incorporated into the June 26, 2001 Final Office Action)." Appellant disagrees.

Firstly, claims 8 and 10 depend from independent claim 1 and stand or fall together therewith. The secondary reference to Thompson does not cure the argued deficiencies of either Keller or Evans. Ergo, even **if** these references are combined, the claimed invention would **not** result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Appellant again submits that the Examiner did **not** establish the requisite **factual basis** to support the determination that either Keller or Evans discloses, suggests, enables or inherently involves a method as defined in claim 9, and independent claims 19 (Group II) or 25 (Group III).

Neither Keller nor Evans discloses, suggests, enables or inherently involves a method, as defined in dependent claim 9, (which depends upon independent claim 1) wherein a house advantage is provided within a predetermined range, but includes the additional limitation that "the house advantage is at least a set limit based upon all answers to all queries in the knowledge-based bonus game are always correct."

Where is the above quoted limitation in the applied prior art, bearing in mind that the house advantage is based upon the **combined** knowledge-based bonus game with the underlying game of chance"? It is not in Keller. It is not in Evans. And it is not in Thompson. Ergo, even **if** the applied references are combined, the invention defined in claim 9 would **not** result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, *supra*.

Neither Keller nor Evans discloses, suggests, enables or inherently involves a method as defined in independent claim 19, comprising, inter alia:

providing a house advantage within a predetermined range for
the combined knowledge-based bonus game and underlying casino

game, the predetermined range having a set limit based at least upon all answers to all queries in the knowledge-based game are always correct and the wager.

Further, neither Keller nor Evans discloses, suggests, enables or inherently involves a method as defined in independent claim 25, wherein:

the combined knowledge-based bonus game with the underlying casino game having a house advantage in a range from a first set limit based on all answers to all queries are correct and a second limit based on all answers to all queries are guessed.

As previously argued with respect to rejection of claim 1 under 35 U.S.C. §102 for lack of novelty, neither Keller nor Evans discloses, suggests, enables or inherently involves a casino game wherein a house advantage is controlled **within any predetermined range** based upon the combined knowledge-based bonus game and underlying game of chance. Claim 19 is even more remote by specifying that the predetermined range has a limit based upon all answers to all queries and the knowledge-based game are always correct and the wager. Claim 25 is also further removed by specifying that the house advantage is in a range, the first limit based upon all answers to all queries being correct and the second limit based upon all answers to all queries being guessed.

Indeed, as to Groups II and III, neither Keller or Evans discloses, suggests, enables or inherently involves a casino game wherein a first amount is paid for a correct answer and a second amount is paid for an incorrect answer to a question. Keller does not even disclose what happens when a player loses the skill game. In the game disclosed by Evans, the player only receives a prize if successful at the skill game. The additional reference to Thompson does **not** cure the argued deficiencies of Keller and Evans. Ergo, even **if** the applied references are combined, a conclusion with which Appellant disagrees, the inventions of Groups II and III would **not** result. *Uniroyal, Inc. v. Rudkin-Wiley Corp., supra.*

Moreover, Appellant submits that the Examiner did **not** establish the requisite realistic motivation for combining Thompson with either Keller or Evans. As mandated by the Court of Appeals for the Federal Circuit, in order to establish the requisite motivational element, the Examiner must make a "thorough and searching" factual inquiry and, based upon that factual inquiry, explain **why** one having ordinary skill in the art would have been realistically motivated to modify particular prior art, in this case Keller's method and the method disclosed by Evans, to arrive at the claimed invention. *In re Lee*, 237 F.3d 11338, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). Generalizations do not suffice. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 57 USPQ2d 1161 (Fed. Cir. 2000); *Ecolochem Inc. v. Southern California Edison, Co.* 227 F.3d 1361, 56 USPQ2d 1065 (Fed. Cir. 2000).

In applying these legal tenets to the exigencies of this case, Appellant submits that the requisite motivation has not been established. Specifically, Thompson, the allegedly teaching reference, discloses a household game with **no wager or house advantage**. Timers are used that time out during game play. It is **not** apparent and the Examiner has **not** cogently **explained why** one having ordinary skill in the art would have been realistically impelled to **stop** Keller's game or the game disclosed by Evans by providing a timer, as disclosed by Thompson. Indeed, **if** Keller's game is modified by providing a timer, no tokens would be paid out and Keller's game would be rendered **inoperative**, since Keller's game must normally conclude with a winning combination before the player receives a token. Similarly, **if** the method disclosed by Evans is modified as suggested by the Examiner by providing a timer, the disclosed method would be **inoperative** since it would not result in a prize, because the game must be played to completion and a winning combination must be achieved so that the player can play the game of skill to earn

a payoff.

It should, therefore, be apparent that **if** the method of either Keller or Evans is modified as suggested by the Examiner, the disclosed methods would be rendered **inoperative**. It is well settled that one having ordinary skill in the art would **not** be considered realistically motivated to modify a reference in a manner **inconsistent** with the disclosed objective i.e., to render it **inoperative**. See, for example, *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992); *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); *In re Schulpen*, 390 F.2d 1009, 157 USPQ 52 (CCPA 1968).

Based upon the foregoing, it should be apparent that the Examiner has not established a prima facie basis to deny patentibility to any of the appealed claims. Moreover, there is an abundance of evidence of **nonobviousness** which merits consideration.

Evidence of Nonobviousness

1. The problems addressed and solved by the claimed invention.

It is well settled that the problem addressed and solved by a claimed invention must be given consideration as an indicium of **nonobviousness**. *North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 28 USPQ2d 1333 (Fed. Cir. 1993); *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 15 USPQ2d 1321 (Fed. Cir. 1990); *In re Newell*, *supra*; *In re Nomiya*, 509 F.2d 566, 184 USPQ 607 (CCPA 1975). The Examiner has clearly ignored this potent indicium of **nonobviousness**.

Specifically, a first problem addressed by the present invention is to ensure house viability in the presence of a perfect knowledgeable player, under the regulatory guidelines requiring each game to be the result of a random, independent process as imposed in the United

States.⁴ A second problem addressed by the present invention is to provide a fair game to a player with no knowledge, i.e., without a prohibitively high house advantage.⁵

The first problem is solved without proactive monitoring, as is conventional, but by setting a house advantage for the casino game over time, and mathematically based on random, independent events as produced, for example, in the random number generator 50 illustrated in Fig. 1. The solution to the second problem is achieved by setting a house advantage for the player who always guesses at an answer.

It is **not** apparent and the Examiner has **not** identified wherein any of the applied references addresses the above noted problems or remotely offers a solution to such problems, particularly the solutions embodied in the claimed inventions. Under such circumstances, the problems addressed and solved by the claimed inventions constitute potent indicia of **nonobviousness**.

The Declaration Evidence

The Vancura declaration executed May 18, 2002 (Exhibit 1) merits consideration not only with respect to the **problems** addressed and solved by the claimed invention, but also for the **expert interpretation** of the applied references, notably the interpretation set forth in paragraphs 9 and 10, which ought to carry more weight than the unsupported assertions of the Examiner with respect to inherency. *In re Alert*, 579 F.2d 86, 198 USPQ 210 (CCPA 1978); *In re Meg*, 492 F.2d 843, 181 USPQ94 (CCPA 1974).

The Declaration of Grochowski (Exhibit 2) executed April 23, 2001, notably in

⁴ Exhibit 1, paragraph 6.

⁵ Exhibit 1, paragraph 7.

2, constitutes evidence of long felt need, which is an indium of nonobviousness. *Ecolochem v. Southern California Edison, supra*. Significantly, Grochowski in paragraph 3 clearly establishes the skepticism of an expert in the art, which is another potent indicium of **nonobviousness**. *Luis v. A.B. Chance Co., supra*; *Environmental Designs, Ltd. v. Union Oil Company of California*, 713 F.2d 693, 218 USPQ2d 865 (Fed. Cir. 1983).

The Declaration of Gushin executed May 31, 2001 (Exhibit 3) further evidences the nonobviousness of the claimed invention. In paragraph 3 of the Gushin declaration, the Declarant states:

I was very surprised and intrigued to find such features available, as I previously did not believe it was possible to include such a knowledge-based component in a casino game and still have the game adhere to the necessary house advantage requirements of North American Gaming Jurisdiction.

Again, the expressions of disbelief by experts, merit consideration as strong evidence of **nonobviousness**. *Luis v. A.B. Chance Co., supra*; *Environmental Designs, Ltd. v. Union Oil Company of California, supra*.

3. Commercial Success

The article "Best of Slots 2002" appearing in the publication "Strictly Slots", of October 2002, page 42, (Exhibit 4) contains the results of an-extensive ballot mailed out to its readers to pick their favorites. "Ripley's Believe It or Not!" won in the MOST INNOVATIVE VIDEO SLOT category. Strictly Slots stated "We love Mikohn's version of Ripley's Believe It Or Not because it gives us the chance to prove we're know-it-alls. *As the first game that actually rewards for trivia*, we can't wait to see the machines they come up with next." (emphasis added) Id. At 48.

The article "The Future of Slots" also appearing in Strictly Slots in the September 2002 issue, page 51, (Exhibit 5) states "It can be said that Mikohn *truly revolutionized slot play ... with the first knowledge-based slot*, Ripley's Believe It or Not! Adventures in Trivia.(emphasis added) Id.

That the games mentioned have actually been implemented in casinos and merit notice by experts in this field, despite the established skepticism, speaks strongly of nonobviousness. *Luis v. A.B. Chance Co., supra*.

It should be apparent from the above publications that casino games comprising a combined knowledge-based bonus game with an underlying game of chance with a house advantage within a predetermined range, encompassed by the claimed inventions, have been successfully implemented and, hence, enjoy commercial success. *Applied Materials v. Advanced Semiconductor Materials of America* 98 F.3d 1563, 40 USPQ2d 1481 (Fed. Cir. 1996). Such commercial success has been achieved in the face of skepticism and longfelt need. *Luis v. A.B. Chance Co., supra; Ecolochem v. Southern California Edison, supra*.

Conclusion

It should, therefore, be apparent that a prima facie basis to deny patentability to the claimed invention under 35 U.S.C. §103 has not been established. Moreover, upon giving due consideration to the potent indicia of **nonobviousness**, the conclusion appears inescapable that one having ordinary skill in the art would **not** have found any of the claimed inventions obvious **as a whole** within the meaning of 35 U.S.C. §103. *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984). Appellant, therefore, submits that the imposed rejection of claims 8 through 10, 19, 24, 25 and 30 under 35 U.S.C. §103 for obviousness predicated upon each of Keller and

Evans in view of Thompson is not factually or legally viable.

IX. PRAYER FOR RELIEF

Based upon the arguments submitted supra, Appellant submits that the Examiner's rejections are not factually or legally viable. Appellant, therefore, solicits the Honorable Board to reverse each of the Examiner's rejections under the first paragraph of 35 U.S.C. §112, the second paragraph of 35 U.S.C. §112, 35 U.S.C. §102 and 35 U.S.C. §103.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT, WILL & EMERY



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Date: February 24, 2003

APPENDIX

1. A method for playing a casino game comprising the steps of:
receiving a wager,
playing an underlying game of chance,
playing a knowledge-based bonus game using answers from a player in combination with the underlying game of chance, the combined knowledge-based bonus game with the underlying game of chance having a house advantage within a predetermined range.

3. The method of claim 1 wherein the step of playing the knowledge-based game occurs when play of the underlying game of chance stops.

8. The method of claim 3 wherein stopping of the underlying game of chance is randomly chosen at a given frequency.

9. The method of claim 1 wherein the knowledge-based bonus game has queries with answers and wherein the house advantage is at least a set limit based upon all answers to all queries in the knowledge-based bonus game are always correct.

10. The method of claim 1 wherein the knowledge-based bonus game has queries with answers and wherein the house advantage is at most a set limit based upon all answers to all queries in the knowledge-based game are always guessed at.

18. The method of claim 1 wherein the step of playing the knowledge-based bonus game further comprises the steps of:

paying the player a first amount when the player correctly answers,
paying the player a second amount when the player incorrectly answers.

19. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of:
receiving a wager,
playing the underlying casino game of chance,
stopping play of the underlying casino game of chance,

playing the knowledge-based bonus game when the underlying casino game of chance is stopped, the steps of playing the knowledge-based game at least having the steps of:

- (a) providing at least one query to the player in the knowledge-based game,
- (b) receiving at least one answer from the player in response to the provided at least one query,
- (c) paying the player based upon the at least one answer by the player

providing a house advantage within a predetermined range for the combined knowledge-based bonus game and underlying casino game, the predetermined range having a set limit based at least upon all answers to all queries in the knowledge-based game are always correct and the wager.

24. The method of claim 19 wherein the step of paying the player further comprises the steps of:

paying the player a first amount when the player correctly answers the at least one query,

paying the player a second amount when the player incorrectly answers the at least one query.

25. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of:

playing the underlying casino game of chance,

playing the knowledge-based bonus game in combination with the underlying game, the steps of playing the knowledge-based game at least having the steps of:

- (a) providing at least one query to the player in the knowledge-based game,
- (b) receiving at least one answer from the player in response to the provided at least one query,

the combined knowledge-based bonus game with the underlying casino game having a house advantage in a range from a first set limit based on all answers to all queries are correct and a second limit based on all answers to all queries are guessed.

30. The method of claim 25 wherein the step of playing is randomly chosen at a given frequency.

EXHIBIT 1



Docket No. 1482/198(a)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Patent Application of
Vancura

Serial No.: 09/372,560

Filed: August 11, 1999

For: KNOWLEDGE-BASED CASINO GAME
AND METHOD THEREFOR

Group Art Unit: 3711

Examiner: W. Pierce

DECLARATION OF OLAF VANCURA
UNDER 37 CFR 1.132

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Dear Sir:

I, Olaf Vancura, do hereby declare that:

1. I am the Executive Director -- Games Development at Mikohn Gaming Corporation and the sole-inventor of the above-described invention. I received my Ph.D. in Physics from The Johns Hopkins University and was a post-doctoral fellow and an astrophysicist at the Harvard-Smithsonian Center for Astrophysics. I developed and for several years taught the Casino Gambling Course at Tufts University, which was very popular and received a nomination for "the best course at Tufts." For over a year, I served as a consultant to the gaming industry. I am the author of the book **Smart Casino Gambling** (334 pages, 1996, Index Publishing Group, Inc.) and co-author of the book **Knock-Out Blackjack** (179 pages, 1998, Huntington Press). I am the lead editor of **Finding the Edge: Mathematical Analysis of Casino Games** (441 pages, 2000, University of Nevada -- Institute for the Study of Gambling and Commercial Gaming) in which I authored a paper entitled "**A Computer Teaches Itself to Play Blackjack**" (Id. at pages 81-102) and co-authored a paper entitled "**A Study of Index Rounding in Card-Counting**" (Id. at pages 71-79). I have been

a guest on several radio programs involving gambling. I have been: (a) filmed for several television programs involving gambling, including specials that have and will appear on The Learning Channel and the like; (b) interviewed for articles by The New York Times and Reuters, among other publications; and (c) featured in articles appearing in Discover magazine, Esquire magazine, and Casino Journal magazine. I have also (a) written cover articles for Casino Player magazine (November 1997 and October 1998 issues); (b) given an inaugural UNLV "Excellence in Gaming" Lecture (September, 1997); given an invited lecture as part of the Gaming Management Distinguished Speaker series at University of Nevada Reno (1997); given an invited lecture on the Probability and Statistics of Gaming at the Chance Lecture series at Dartmouth University (1997); given an invited lecture at the Casino Management Association (October, 1998); and (c) served as a member of the faculty for the UNR Executive Development Program (1998). I have chaired or served on panels discussing gaming related issues at gaming conferences. I am the inventor or co-inventor on several awarded gaming-related patents.

2. Prior to developing the invention described above, I was aware that slot machines in the United States are required by the various gaming authorities to respond to a random selection process such as a random number sequence from a random number generator, or the spin of a mechanical wheel in a random fashion. By way of current example, the Regulations of the Nevada Gaming Commission and State Gaming Control Board require that the gaming device "must use a random selection process to determine the game outcome of each play of a game" (§ 14.040 Paragraph 2).). For slot machines, the "mathematical probability of a symbol appearing in a position in any game outcome must be constant" (Id. at Paragraph 2b). This "selection process must not produce detectable patterns of game elements or detectable dependency upon any previous game outcome" (Id. at Paragraph 2c). Finally, it is mandatory that the gaming device "must not automatically alter pay tables or any function of the device based on the internal computation of the hold percentage" (Id. at Paragraph 5).

3. Recently, bonus games have been added to underlying slot machines. In a conventional bonus game, play on the underlying machine is temporarily stopped and the player participates in the bonus in a risk-free (i.e., no chance of net loss) manner. It is my belief that all such bonus games in the United States, including those in which the player makes a decision, retain and indeed rely upon an element of randomness in determining the game result. In the past 60 years, a large number of well-known television game shows have aired, most of which utilize knowledge as the primary element for player participation. As of today, the following well-known television game shows have been adapted to the slot machine environment: Wheel of Fortune, Jeopardy!, Family Feud, and The Price Is Right. In each case, the adaptation includes the brand name, trademarks, logos, and sound effects, and may include the likeness of the host. That is, the themes of the well-known television game shows have been adapted, but the element of player knowledge (wherein the player answers) required in the actual television show is entirely missing. I am familiar with the prosecution of my patent application, I earlier provided articles on the following two examples to the United States Patent and Trademark Office: Jeopardy! and Family Feud. Knowledge of the answer by the player in the play of these casino bonus games has no effect (nor can the player even input such an answer based on the player's knowledge). I believe the games suffer in this regard.
4. I don't know why knowledge-based games haven't been incorporated into casino slot machines in the United States. I surmise that game designers never understood how to ensure commercial viability, i.e., an assured rate of win for the house, against a player with perfect knowledge (or a team of players), and/or preserve fairness of return, i.e. an equitable game with a non-prohibitive rate of loss, against a player with no-knowledge. The problem, as I saw it, was how to achieve both of these goals under requirements of independence and randomness in determining the game outcome for each play of a game. It was my objective, which led to the invention described above, to provide casino games of chance that responded to answers based upon players' actual knowledge that satisfied these goals. In the specification, I carefully defined the words "skill," "game of chance," and "knowledge". As I stated therein, a game of chance is based on randomness in determining a result even in the presence of

skillful players. A knowledge-based game is one wherein a player's answers to questions, on an individual game basis, necessarily yields a result (e.g., incorrect on second answer) without any element of chance.

5. In preparation for this Declaration and to understand how others might have addressed the problem, I recently studied a number of additional British references which are submitted herewith. Some of these references are skill with prize (SWP) (no element of chance) and some are amusement with prize (AWP) (with element of chance or quasi-chance). In these British references (for example GB 2 253 569A (SWP); GB 2 188 182A (AWP); GB 2 185 612A (SWP); and GB 2 087 618A (AWP)), it is well recognized that there exists a problem of assurance of machine income against a knowledgeable player. The '569A reference, at page 1, articulates the knowledgeable player problem which it solves by continually changing the questions to prevent memorization of all the answers. The '182A reference, (page 1, lines 9-12) adjusts a prize based in part on a prize fund, related in turn to the amount paid in and the amount paid out in prizes in previous games. This has the deleterious effect that a player achieving the same score may not receive the same award (page 2, lines 21-22). The '612A reference discusses (page 1, lines 14-16) how machines can lose money against a "clever player." A method is cited (page 1, lines 20-33) whereby a machine monitors the income and expenditure from the machine and then stabilizes (i.e., to prevent bankruptcy) by altering the odds of winning. Alternate methods of monitoring income and expenditures to vary the difficulty of questions, the time limit to answer, or the prizes, are presented. The '618A reference continually monitors coin-in and coin-out and adjusts the frequency of a feature based on a comparison of coin-in and coin-out to a desired value. Thus, the long-term expectation of all players is identical (regardless of skill or knowledge). The instantaneous expectation (of an individual spin) is a function of the outcome of previous spins. This approach of machine stabilization represents an approach entirely against the teachings of my invention where no machine self-adjustment is required since, under my formulas, my set limits are fixed and the machine does not change as it would never face bankruptcy in the presence of a knowledgeable player (indeed, even in the presence of a perfect

knowledge player). In these references, to the extent that assuring machine income is discussed, I have concluded that "adaptive logic" is utilized. By "adaptive logic," I mean that the machine itself monitors past performance of wagers-in and payoffs-out in real time, and changes awards, probabilities of awards, and/or other relevant factors of future games to ensure commercial viability of the machine. In the United States, it is my belief that the British type of "adaptive logic" permitting changes (such as, e.g., reducing the probability of winning an award) based on wagers-in and pays-out is expressly prohibited by regulation (see Paragraph 2, above). In the United States, the selection process to determine each game outcome is required to operate in a random, independent manner from the preceding and following game outcome.

6. The first problem in obtaining my goal of designing the present invention was how to ensure commercial viability to the house in the presence of a perfect knowledge player or a team of players working together from cleaning out or bankrupting the house (Specification page 18, lines 5-8). This had to be accomplished under the regulatory guidelines requiring each game play to be the result of a random, independent process as imposed in the United States. My solution is entirely different than the adaptive logic approach which depends upon proactively monitoring and adjusting the game. My solution provides for a game which need not be monitored and need not monitor itself, as it provides a set house advantage for the perfect player for playing of the game (e.g., see page 11, lines 7-11, and page 17, lines 20-24) over all play of the casino game. The word "set" means that, in the presence of a perfect player, the house advantage is fixed at a limit, does not vary from spin to spin, and is mathematically based on random, independent events as produced, for example, in the random number generator 50 in Figure 1. This is repeatedly illustrated in my formulas and in my examples throughout the Specification. A perfect knowledge player (i.e., answers always correct) can never bankrupt the house under my invention.
7. The second problem in obtaining my goal of designing the present invention was how to provide a fair game to a player with no knowledge - i.e., provide a game

without a prohibitively high house advantage. The goal was to encourage such players to continue to play even though they were not always correct in their responses (Specification, page 17, lines 1-4). My solution provides a set house advantage for the player who always guesses at the answers. Again, the word "set" means that in the presence of a player who always guesses, the house advantage is mathematically fixed at a limit based on random, independent events as produced, for example, in the random number generator 50 in Figure 1. Again my formulas and my examples are provided throughout the Specification.

8. My mathematical formula of the house advantage is based on the player's expected return for the underlying game of chance such as a slot machine, the player's expected return for the knowledge-based bonus game, a known frequency rate for stopping the underlying game of chance, and the wager. I have solved both of the aforementioned problems for the player with perfect knowledge who always provides correct answers and for the player who always guesses and yet I preserved the random, independent events as fully set forth in my formulas. The resulting invention provides an instantaneous house advantage in a predetermined range between the set limits of the perfect player and the player who always guesses. Hence, a perfect player can never break the house as the house has a statistical house advantage that is preserved over time (Specification, page 17, lines 20-24). Yet, the player who always guesses is assured a fair return under a second statistical house advantage that is preserved over time. The instantaneous house advantage falls within this predetermined range and is a function of the actual knowledge of the player (Specification page 12, lines 4-8, 14-16). In one embodiment (Specification page 21, lines 23-25) questions are randomly re-used, and there is an incentive for players to continue playing or "learning" the game, as their instantaneous and long-term expectation increases (although bounded by the predetermined, set limits) based on knowledge of the answers. The average house advantage, hence rate of winning, will fall somewhere in the predetermined range (Specification, page 12 lines 5-9). These formulas (i.e., Formulas 1, 2, 3, 4, 5, 6,

7, 8, and 9) provide pre-calculated values that are fixed (i.e., set) for a given game and do not depend on previous play outcomes.

9. I have analyzed the Keller Jr. reference (U.S. 5,718,429). Keller is not a casino game that requires a statistical house advantage based on random events. Keller "sells" tickets preferably in the form of "chips" to create the "ambiance" of a casino (col. 2, lines 4-6 and lines 63-67). I believe Keller has no house advantage as used in our application; instead a fee payment is made for the received entertainment. Although Keller is ambiguous as to manner of making money, I believe the intention is for the person conducting the entertainment to always be paid up front (col. 2, lines 8-10 and lines 59-61). A player at the Keller casino game (not a traditional casino game) who wins receives "tokens" which have no monetary value (col. 2, lines 35-38). These "tokens" are not monetary casino chips and cannot be replayed in Keller's casino game (col. 2, lines 39-42). These "tokens" are then played at separate skill games. I believe Keller is little more than an arcade game method wherein money is paid for "entertainment" services, and wherein two separate games are played, possibly ending in money being awarded. It does not teach a self-contained casino game of chance with a knowledge-based bonus game operative with conditions appearing in an underlying game of chance such as a slot game. It does not teach a predetermined house advantage in the manner conventionally used in casino gaming (and as used in my application). It does not teach my house advantage as a function of expected returns for an underlying game, or bonus game, frequency of the bonus game, and wager, nor would his method have any need to meet the rigorous requirements of a casino house advantage.
10. I have analyzed the Evans reference GB 2 197 974A and find it to be entirely silent on house advantage, fixed mathematical methods, and machine income. This reference teaches a conventional fruit machine with a look-up table 7 showing prizes for winning combinations of symbols on the payline, where in order to obtain the prize, a player must successfully answer a predetermined proportion of successive questions (page 4, lines 15-23). The player can only

receive the underlying game potential payoff upon successful completion of the skill game.

11. In the implementation of my invention, it was also a goal to reward players with incorrect answers to encourage play such as the following types of payoffs in the knowledge-based bonus game: (a) paying for all answers whether correct or not, at no risk to the player; (b) paying more for correct answers and less for incorrect answers; (c) paying more for correct answers and less for incorrect answers, wherein all pays are positive (non-zero); (d) paying more for correct answers and less for incorrect answers, wherein all pays are greater than the player's wager. One aspect of my invention is to reward, in a risk-free manner, players having entirely wrong answers in the knowledge-based game. This encourages players with little or no knowledge while also encouraging knowledgeable players to continue play at the machine. I am unaware of any knowledge-based casino game of chance that provides both of these features.
12. I have designed for the first time a self-contained casino game having a risk-free knowledge-based bonus game implemented with an underlying game of chance, wherein each play is a random event, and wherein the minimum possible house advantage (i.e., against a perfect knowledge player who knows all the answers) may be precalculated. I have also designed for the first time a self-contained game of chance with a risk-free knowledge-based bonus game, wherein each play is a random event, and wherein the maximum possible house advantage (i.e., against a no knowledge player who guesses at all the answers) may be precalculated. I have designed for the first time a knowledge-based bonus game that actually pays the player based on the correctness of the answer and provides an instantaneous house advantage that is a function only of fixed parameters (R , f , and X) and the player's current knowledge.
13. While the application covers many different embodiments, the first commercial embodiment to be offered, by the assignee of the present application Mikohn Gaming Corporation, will be "Ripley's Believe It or Not! Adventures in Trivia" (hereinafter "Ripley's"). The underlying game of chance is a multi-reel, multi-line,

self-contained video slot machine. Upon the appearance of two or more trigger symbols (i.e., the condition) left to right, starting with the left-most reel, and adjacent, on any active payline, the knowledge-based bonus game initiates. This casino game is based on the formulas disclosed in the Specification. A casino player will have the opportunity to earn greater payoffs in a casino game based upon the player's actual knowledge in the play of a knowledge-based trivia game, in part, utilizing Ripley's Believe It or Not! publications and the like. Yet, a player who doesn't know the answer but simply guesses, also obtains an award (if the correct guess, a higher award, if the incorrect guess, a lesser award, but in all cases an award greater than the wager). The Ripley's casino game has to date received regulatory approval for California, Connecticut, Iowa, Louisiana, Michigan Native Americans (i.e., compacted tribal gaming only), Minnesota, Mississippi ((i.e., compacted tribal gaming only), Missouri, New Mexico (Tribal) from Gaming Laboratories International, Inc. Other requests for regulatory approval are pending. With the debut of Ripley's, I believe that for the first time, a player of a casino game can use his/her knowledge to win more money in an environment wherein (a) the house does not worry about bankruptcy, and (b) the player doesn't experience a changing machine that monitors itself (i.e., changes odds, prize values, etc. as found in "adaptive logic" designs).

14. On April 24, 2001, I demonstrated a version of the Ripley's casino game to John J. Grochowski who is both a journalist that reviews new casino games and an experienced expert in casino games. I did not explain the mathematical theory of my invention, but I did demonstrate the operation of the Ripley's casino game. I asked him to provide a statement for the Patent Office, his voluntary Declaration is attached.
15. All statements made herein of my own knowledge are true, and all statements made on information and belief are believed to be true, and that the foregoing statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that my willful false statements or the like may

jeopardize the validity of the above-identified patent application or any patent issued thereon.

05/18/01
Date

Olaf Vancura
Olaf Vancura

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EXHIBIT 2



Docket No. 1482/198(a)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Patent Application of
Vancura

Group Art Unit: 3711

Serial No.: 09/372,560

Examiner: W. Pierce

Filed: August 11, 1999

For: KNOWLEDGE-BASED CASINO GAME
AND METHOD THEREFOR

DECLARATION OF JOHN J. GROCHOWSKI
UNDER 37 CFR 1.132

DECLARATION OF JOHN J. GROCHOWSKI

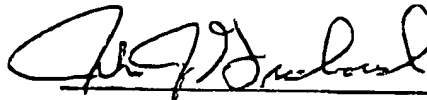
Honorable Commissioner of Patents and Trademarks
Washington, DC 20231

I, John J. Grochowski, do hereby declare that:

- 1) I am a gaming columnist for the Chicago Sun Times and write two columns per week on gaming. These columns are re-distributed by the Detroit News and the Shreveport Times. I have authored five books on casino gambling and co-authored two others including *The Slot Machine Answer Book: How They Work, How They've Changed, and How to Overcome the House Advantage* (1999, Bonus Books), *The Casino Answer Book: How to Overcome the House Advantage When You Play Blackjack, Video Poker, and Roulette* (1998, Bonus Books), *The Video Poker Answer Book: How to Attack Variations on a Casino Favorite* (2000, Bonus Books), *Gaming: Cruising the Casinos with Syndicated Gambling Columnist John Grochowski* (1996, Running Count Press), *Winning Tips for Casino Games* (1995, Signet Reference), *109 Ways to Beat the Casinos: Short, Specific Tips that Make You a Winner From the Nation's Best Casino Gambling Writers* (2000, Bonus Books), *The Experts' Guide to Casino Games: Expert Gamblers Offer Their Winning Formulas* (1997, Carol Publishing). I also frequently write articles that appear in the following magazines: *Chance: The Best of Gaming*, *Midwest Gaming and Travel*, *Chance and Circumstance*, *International Gaming and Wagering Business*, *Slot Manager*, *Casino Executive*. Each year, several of these magazines solicit me to evaluate new casino games.
- 2) It is my belief that, for a long time, there has been a need for a casino game that allows players the opportunity to test their knowledge with awards based on their answers to questions. Currently, casino games exist that are based on television shows that test players' knowledge, but the casino adaptations of these shows do not include such a test of knowledge.
- 3) It is surprising to me that a casino game with such a test of a player's knowledge could be developed while remaining within regulatory and/or legal limits. I believe there is a risk, from players who know all the answers, that the game would not be able to conform to assuring a minimum house advantage.
- 4) All statements made herein of my own knowledge are true, and all statements made on information and belief are believed to be true.

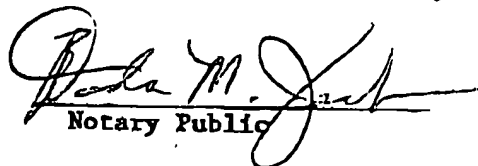
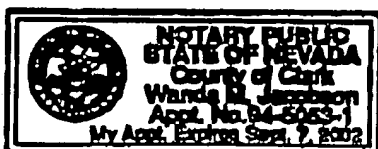
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Date



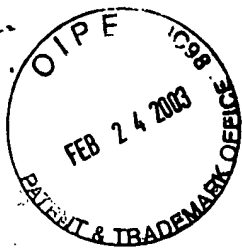
John J. Grochowski

This instrument was acknowledged before me on April 23, 2001 by
John J. Grochowski.



Notary Public

EXHIBIT 3



Docket No. 1482/198(a)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Patent Application of
Vancura

Group Art Unit: 3711

Serial No.: 09/372,560

Examiner: W. Pierce

Filed: August 11, 1999

For: KNOWLEDGE-BASED CASINO GAME
AND METHOD THEREFOR**DECLARATION OF FREDRIC E. GUSHIN**
UNDER 37 CFR 1.132Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Dear Sir:

I, Fredric E. Gushin do hereby declare that:

1. I am the Managing Director of Spectrum Gaming located at 2 Donovan Road, Pennington, NJ 08534. From 1973 until 1978 I served as a Trademark Attorney and, on a detail, as a Special Assistant to The Assistant Commissioner of Trademarks. From 1978 until 1991, I was a Deputy Attorney General for the State of New Jersey assigned to the State of New Jersey Division of Gaming Enforcement (DGE) where I rose to the position of Assistant Director of DGE. In this latter position I had the direct responsibility over the gaming equipment laboratory wherein all gaming devices were tested to ensure they met the standards for the State of New Jersey. From 1993 until the present, I have been Managing Director of Spectrum Gaming (Spectrum). Spectrum is an international casino gaming consultancy involved in both gaming regulatory and casino development issues. In this capacity I have had the opportunity to review and recommend to casino customers a vast number of gaming devices used in the industry since 1993.
2. In the United States all gaming jurisdictions, based on my knowledge and experience, require that play of the game and the resulting house advantage be set over all play of a casino game chance. For example, a casino game may not alter pay-tables or any function based upon the internal computation of the hold percentage. Moreover, the game must not have any detectable patterns of game elements or detectable dependency on any previous game outcome, the amount wagered, or upon the style or method of play. All jurisdictions, based upon my knowledge and experience, further require that a gaming device must pay out to a player a mathematically demonstrable percentage of all amounts wagered.

-2-

3. I have reviewed the Mikohn Gaming Corporation casino game of chance called "Ripley's Believe It or Not - Adventures in Trivia." In my experience, I am not aware of any casino game of chance having a bonus game wherein players can actually provide correct answers based on their player's knowledge to the casino game and receive higher payoffs. Before the Ripley's Casino game, I had never seen a game with this unique feature that could be included in the gaming device and still guarantee the necessary house advantage (especially against a player who knows all the answers) to allow approval in North American Gaming jurisdictions. Further, the Ripley's casino game provides lower payoffs to players who do not have the correct answers thereby encouraging such players to play. I was very surprised and intrigued to find such features available, as I previously did not believe it was possible to include such a knowledge-based component in a casino game and still have the game adhere to the necessary house advantage requirements of North American gaming jurisdictions.
4. I hereby declare that all statements made herein of my own knowledge are true, and all statements made on information and belief are believed to be true, and that the foregoing statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that my willful false statements or the like may jeopardize the validity of the above-identified patent application or any patent issued thereon.

May 31, 2001
Date

Fredric E. Gushin
Fredric E. Gushin

EXHIBIT 4



Strictly Slots
presents

Best of Slots 2002

Our 2nd annual rundown of the slot machine elite

Welcome to our second annual "Best of Slots" reader's survey, where the winners are chosen not by a panel of editors or gaming executives, but by you, the real-life, casino-hopping slot player. Several months ago, we mailed an extensive ballot to *Strictly Slots* readers, asking them to fill in their favorite games, hotels, restaurants and entertainment—all the things they go to a casino for. What we received back was a remarkably diverse list from players in all parts of the country, that if nothing else reveals that slot players are very definitive when it comes to choosing their favorites.

After computerizing the stacks of ballots that literally flooded our offices for weeks, we compiled the top five winners in each of the following regions: Atlantic City, Las Vegas, Laughlin, Reno/Tahoe, Tunica, the Gulf Coast (including New Orleans), riverboat casinos and Native American casinos. We also divided the slot categories into the three most obvious divisions: reel slots, video slots and video poker.

If all this sounds a bit familiar to you, it could be because you've read our annual "Best of Gaming" awards for the past eight years in *Casino Player*, our sister publication, where we conduct a similar annual reader's survey. But don't assume that the answers are too closely related, though there are some obvious consistencies. *Strictly Slots* readers have some very different opinions than *Casino Player* readers, as you'll see in the results that follow. As an example, whereas both sets of readers give Harrah's casinos top marks for service-related categories, *Strictly Slots* readers clearly favor the Isle of Capri in Biloxi over most casinos on the Gulf Coast.

This survey reveals some extremely important information to all of us—not just to slot players, but to the casino industry as a whole. Understanding what players want, and where they feel they're getting the biggest bang for their bucks, is something every casino executive needs to be aware of (particularly those in the slot department). The better casinos understand this and take action as their customers demand, the more customer loyalty they can expect.

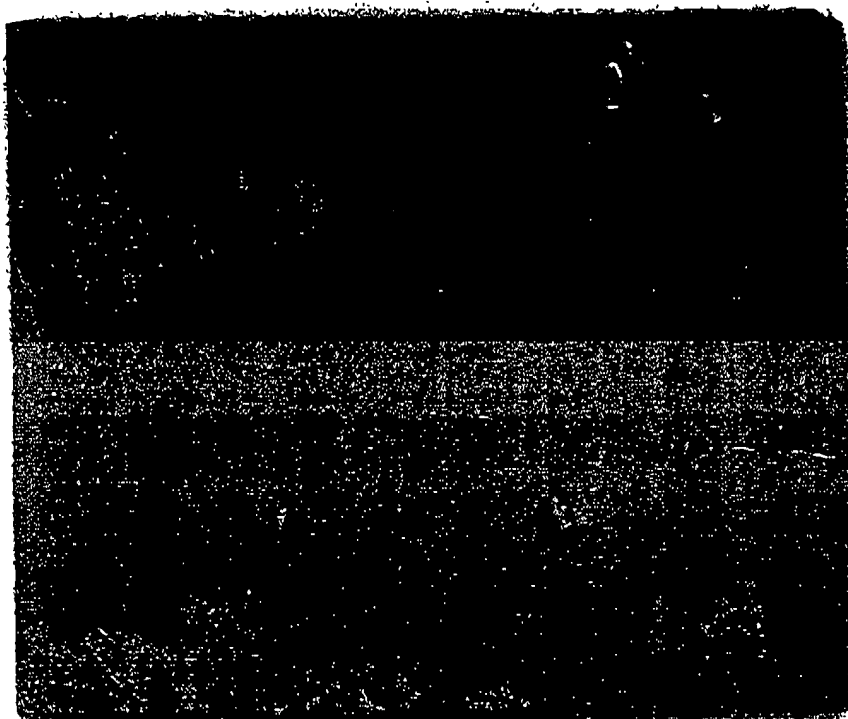
As in last year's survey, the current list clearly shows that value, service and comfort are the touchstones for today's slot players. In the old days, casino operators assumed that players wanted glitz and glamour; and while that remains true to a certain degree, most people now associate that type of experience with "high rollers" or being "uncomfortable." Just as even the best restaurants have become considerably more casual, so too have the casinos. With gambling joints around every corner and gaming well on its way to becoming America's favorite pastime, players want to be relaxed and informal. They want the casino staff to be warm and friendly, not cold and distant. And, of course, they want some bargains and jackpots thrown in along the way. Why bother to get dressed up? Let's just take it easy for a while. That's what today's slot player has to say.

We slot players are an interesting bunch. We all have our peculiar superstitions, our unique beliefs, even the special way we hit the button when we're on a roll. But one thing we all have in common is that we know what we're up against. We're not so foolish to think we're going to come out a winner every time we enter a casino. That's why we take advantage of the system the casinos offer us. We get our comps and cashback, play on triple point days, collect our free gifts and enter all promotions. We stay close to our host, knowing they're our most important ally in getting rooms and show tickets. We measure out our budgets (responsibly, of course) and keep the casinos begging us to come back. And why shouldn't we? That's the game, and that's how it's played. We're not doing anything more than buying into a reciprocal system that the casinos themselves have created. After that, the rest comes down to personal preference.

So having said all that, let's get on with the survey, and see precisely what those preferences are.


Adam Fine
Editor-in-Chief

Best of Slots '02

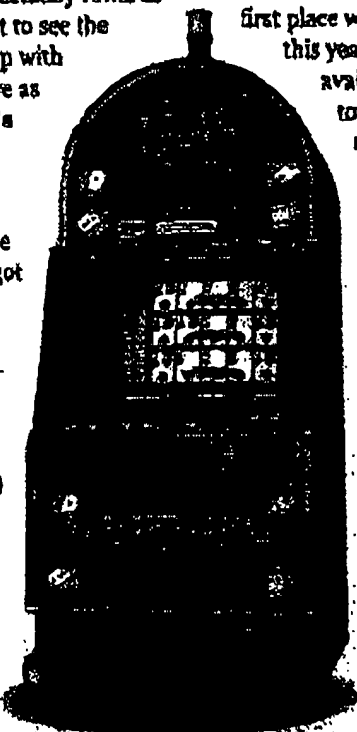


Readers praised Ripley's Believe It Or Not as the year's Most Innovative Video Slot

Most Innovative Video Slot

We love Mikohn's version of Ripley's Believe It Or Not because it gives us the chance to prove we're know-it-alls. As the first game that actually rewards for trivia, we can't wait to see the machines they come up with next. And as innovative as games like Monopoly's Money Grab may be, those two versions of Battleship (also by Mikohn, one where the ships fire back) have got to be the most engrossing bonus games in the industry.

- ① Ripley's Believe It Or Not (Mikohn)
- ② Monopoly (WMS)
- ③ Battleship (Mikohn)
- ④ The Price Is Right (IGT)
- ⑤ Hollywood Squares (WMS)



Video Poker

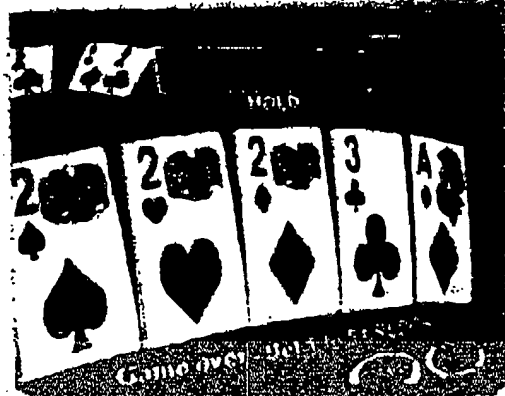
Best Video Poker Game

It was close, but Deuces Wild took first place with video poker players this year. With all the variations available, Deuces can be a tough game—but for real mastery, use Bob Dancer Presents Win Poker video software, and only play the NSU (Not So Ugly) version.

- ① Deuces Wild (IGT)
- ② Jacks or Better (IGT)
- ③ Double Bonus (IGT)

Best Video Poker Variation

They're all the way up to Hundred Play video poker now, but people still prefer the traditional (and revolutionary, when it



first hit the casino scene a few years ago) Triple Play.

- ④ Triple Play (IGT)
- ⑤ Fifty Play (IGT)
- ⑥ Pick 'Em Poker (IGT)

Best New Video Poker Game

Not the easiest game to figure out, but a heck of a lot of fun to play. Spin Poker is probably the only game that has thus far managed to capture some sort of thrill that appeals to both video poker and slot players—no easy task.

- ① Spin Poker (IGT)
- ② Chase The Royal (IGT)
- ③ Austin Powers (IGT)

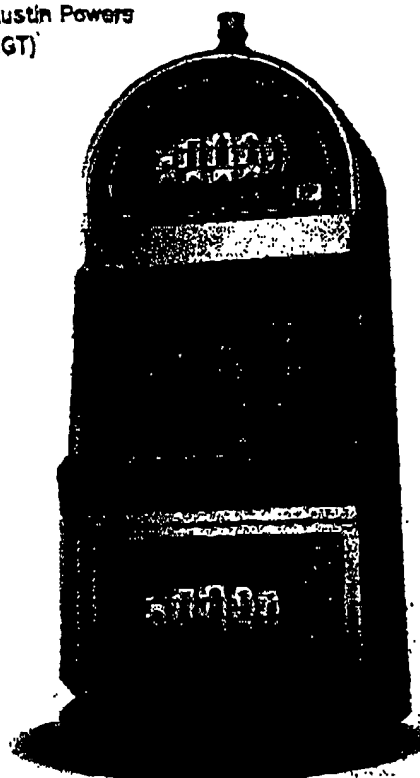
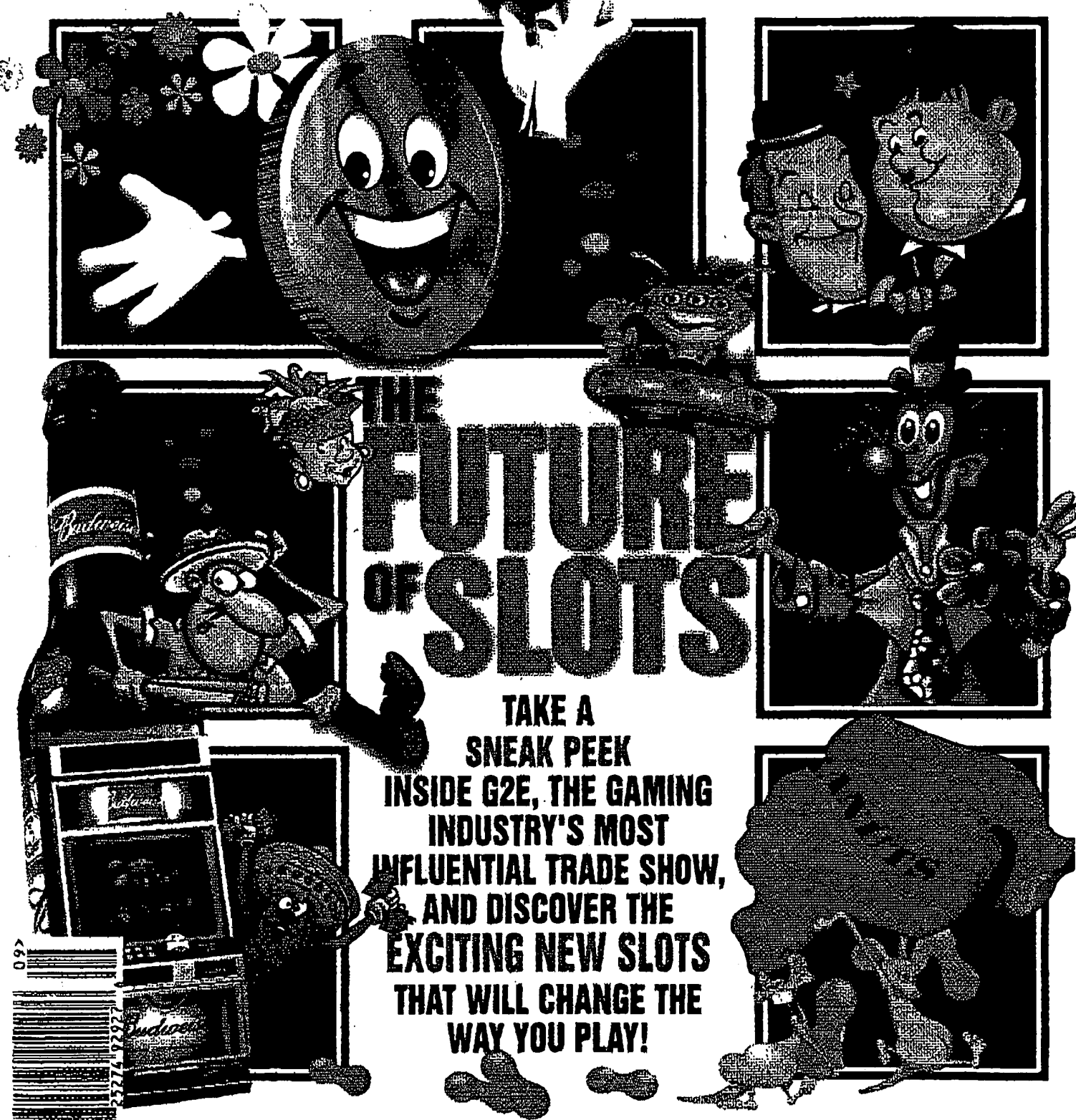


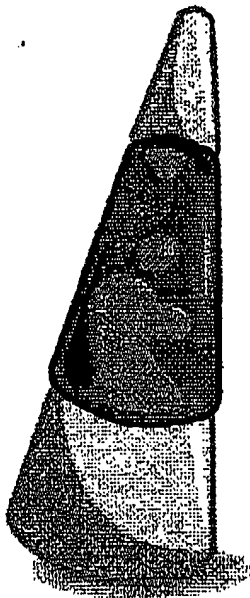
EXHIBIT 5

Strictly Slots

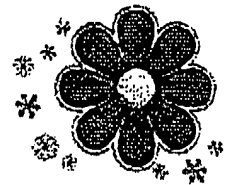
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THE FUTURE OF SLOTS



**Take a sneak peek inside G2E,
the gaming industry's most influential trade show,
and discover the exciting new slots
that will change the way you play!**

by Melissa Raimondi

Every industry has its big annual trade show, where all the insiders gather to discuss the issues and preview the latest and greatest they have to offer.

For independent film makers, it's the Sundance Film Festival. For the computer biz, it's COMDEX. But if you're in the gaming industry, there's one show you just can't miss: the Global Gaming Expo, more commonly known as G2E. It's a joint venture between the American Gaming Association and Reed Exhibitions, and this year, it's being held at the Las Vegas Convention Center, September 17-19. And everyone in the gaming world will be there—with bells, whistles and multiple paylines on.

Headed by President and CEO Frank Fahrenkopf, Jr., the American Gaming Association (AGA) was created in 1995. Its primary goal was to create a better understanding of the gaming entertainment industry by presenting the facts about the industry to the general public, elected officials, decision makers and the media through education and advocacy.

Issues aside, the star of the show is always the exhibition floor. It's here that the slot manufacturers unveil their latest and greatest games, showcasing the best they have to offer in terms of cutting-edge technology, creativity and design.



Manufacturers spend thousands on their booths alone, rigging them with neon lights and special celebrity guests, all in an effort to entice casino executives to spend some time playing the new games and discovering why their slots are a "must have" this year.

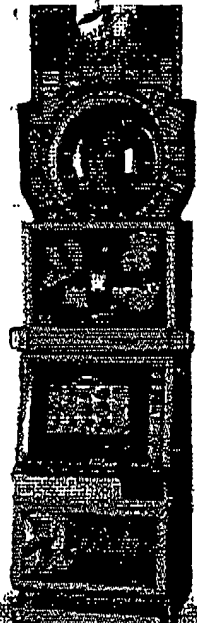
This is top-secret stuff, folks. Slot manufacturers keep their new concepts tightly under wraps right up to their debut. But *Strictly Slots* has been given a sneak peek at what's to come. And trust me, you won't believe what these guys have in store!

So, here's the list, in alphabetical order, of the major manufacturers and their undeniably exciting new creations. Let the games begin!

AC Coin & Slots

Long recognized as one of the leading, most diversified casino supply companies in the country, AC Coin & Slots' products include innovative proprietary slot machines, table games, custom interior casino signage, slot bases and seating.

This year, the company will be showing a number of slots that are joint ventures between IGT and AC Coin & Slot. These include *Bewitched Video Slots*; *Little Green Men, Jr.*; *King of the Grill*; and *Bowler's Rock N' Roll Party* (remember Sha-Na-Na?).



Brand new for AC Coin is **The Honeymooners**, a collaboration with Shuffle Master. As the newest part of the company's Mix and Match Series, the game uses the TV show's theme song and one-liners from the voices of Jackie Gleason and Art Carney, including Jackie Gleason's famous, "You're goin' to the moon!" The reel-spinning game has a top box with figures of Gleason as Ralph Kramden, dressed in his bus driver's uniform, in his racoon lodge hat, and in his notorious golf get-up. The box also includes images of Norton, Tride and Alice. The bonus event keeps players spinning the reels until there's a match of a head, torso and feet of one of the characters.

Aristocrat Technologies

Founded in Australia in 1953, Aristocrat was finally granted licensure in Nevada in 2000, opening up a whole new market for its products.

Each year, Aristocrat's design specialists produce in excess of 250 games. This year, the company's big push is its **MXVI platform**, which offers games with graphics in more than 16.7 million colors and 3-D effects. In addition to higher resolution images, the platform allows for synchronized eight-track sound and graphics. For the player, this simply means more fun, with details such as the sound of the "bet" button getting louder as the amount of the bet increases.

Games that will be running on this new platform include **Double Dolphins**, **Tiki Torch**, **Scatter Magic**, **Go for Green** (a slot for golf lovers!) and **Geisha**. The common thread running through each of these slots is multiple bonus events: scatter pays, free spins and award multipliers fill each game with action and the chance for some very lucrative hits.

And if that's not enough bonusing for you, Aristocrat is adding to these machines a concept devoted to bonusing: **Mr. Cashman**. On each of these machines, there is the option of buying the Mr. Cashman bonus feature for an extra wager. Once "purchased," Mr. Cashman, a happy little coin figure, pops up on the screen and offers five bonus events in addition to those already offered in the base game—he "points" to the win meter and magically increases the amount won, or bounces across the screen, respinning selected reels and multiplying the win by a random value. In a second-screen feature, players can win as many as 40 free games or 1,000 credits.



Atronic

The signature of an Atronic game has always been its ability to offer the player an interactive slot experience, and its new list of products is no exception. This year, the brand will be expanded even more, with the introduction of **Sphinx Magic**, the company's

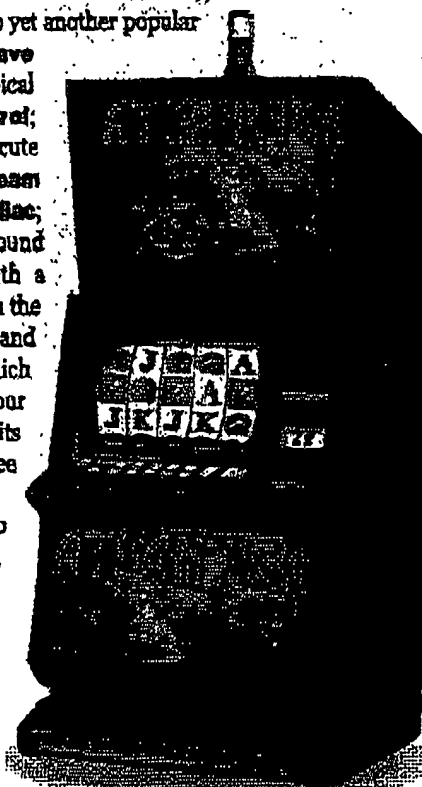
first tower box game. This multilevel progressive, designed to hit frequently, gives the player the option to "win two ways." Doing so makes the player eligible for the "Magic Jackpot," displayed on the top of the tower box. Playing two ways increases the hit frequency. Three or more "Tut & Coin" symbols on an active payline trigger the "Sphinx Magic Feature," which is played out in the "Magic Bonus Cards," also located on the tower box. The player pushes the spin button to start the Magic Light, which randomly stops on one of the five card units; this is repeated until a "collect" card appears. If you get five Magic Bonus Cards, you get either the jackpot (if you're playing "win one way") or the Magic Jackpot.

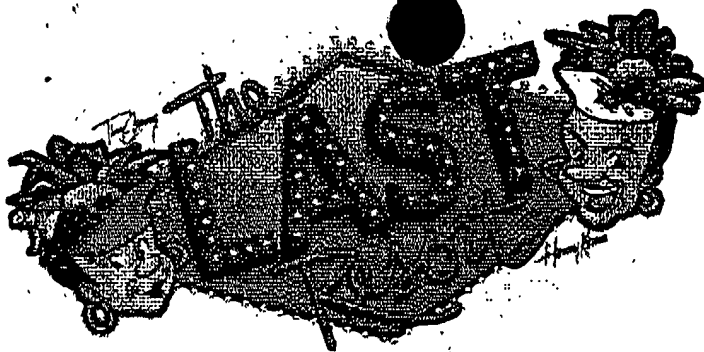
Other games to be introduced include **Atlantica** (based on the lost world of Atlantis); **Clowning Around** (a circus-themed game with animated characters);

I.C. Cash (a follow-up to yet another popular Atronic brand); **Wave**

Watchers (with a tropical theme); **Beach Patrol**; **Ghost Hunter** (full of cute ghostly characters); **Dream Maker**; **Sign of the Zodiac**; **Baboooshka** (themed around those Russian dolls, with a whopping 60 ways to win the jackpot); **Beetlemania**; and **Typhoon Lagoon** (which allows you to choose your bonus—up to 200 credits times the line bet or 20 free games).

Finally, for those who like to think and play big, Atronic will be showing off its **Titan** slot, the industry's first fully functional oversized video slot, geared toward dollar players.





Bally Gaming and Systems

Bally Gaming, celebrating its 70th anniversary, plans to unveil dozens of new game titles at G2E, including a new wide-area progressive link designed to complement its popular Thrillions wide-area progressive system.

Perhaps the most exciting new product is **Cash For Life**, a wide-area progressive link that offers players the opportunity to win \$1,000 a week for the rest of their lives! The game will be featured on both reel-spinning and video platforms, and players will be able to vie for the top progressive reward across different denominations.

"Cash For Life is truly a breakthrough concept that will revolutionize the way players can win a top progressive award," says Mickey Roemer,

Bally Gaming and Systems' senior vice president of game development and sales. "Who wouldn't want to get a check for \$1,000 in the mail each and every week for the rest of their lives?"

The first marquee game to feature the Cash For Life progressive is yet another slot based on a popular game show: **Concentration**, which challenged contestants to remember and then match key parts of a puzzle for prizes. Several anticipated versions of "Cash For Life" will feature well-known game show host Bob Eubanks.

G2E will also see the release of a follow-up to Bally's sultry **Playboy** slot. The EVO HYBRID version of the Playboy video slot will feature a 15-inch touch-screen liquid crystal display (LCD) positioned directly above the reels.

A new reel-spinning slot entitled **Joker's Wild** and an EVO VIDEO game called **Last Resort** will star the much-loved comedy duo of Tim Conway and Harvey Korman from the historic **Carol Burnett Show**.

Then there's a new EVO

VIDEO slot featuring everyone's favorite sailor, **Popeye**. The Popeye Ship Wheel Bonus promises a rapid-hit progressive jackpot and faster game play, designed to increase game time on the device. In addition, a new 27-coin version of the original Popeye EVO VIDEO slot will be showcased, along with three new Popeye-themed reel-spinning progressive slots: Popeye Bonus Frenzy, Popeye Spinach Bonus and Popeye Super Scatter.

Mr. Magoo, **Richie Rich**, legendary pianist **Liberace**, **Frankie and Annette**, **Ray Charles**, and the popular title, **Winning For Dummies**, are some of the other exciting licenses Bally has secured. They'll all be showing up in both reel-spinning and video slots.

International Game Technologies

The leader in slot manufacturing, IGT, is pulling out all the stops at this year's G2E, showcasing more than 70 new products, including a new **Wheel of Fortune** video slot.

"Every year, I say that we'll outdo ourselves in the number and quality of new games introduced at G2E. And the fact is, we do," says Joe Kaminkow, vice president of product design.

New products include slots based on country music legend **Kenny Rogers**, and the hit '60s sitcom, **That Girl**.

One of IGT's product highlights at the show will be the new progressive "pod" concept. With so many themes, and so many MegaJackpots in its arsenal, the idea is a natural: Group those progressive games with similar themes into a single progressive network. The first games in the **Spooky Slots** pod are The Addams Family Cousin It, Elvira Mistress of the Dark, and Young Frankenstein machines. The **Famous Games** pod will include UNO and Magic 8 Ball machines. The **Beverly Hillbillies** (IGT's first MegaJackpots penny wide-area progressive) and **M*A*S*H** machines will be the first games in the **TV Hits** pod. And the **Game Show Greats** pod will initially include Sale of the Century machines.

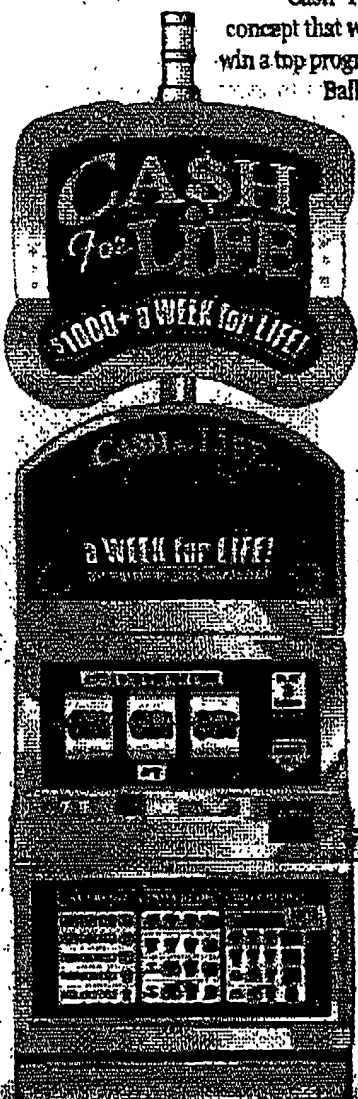
"We've greatly expanded our MegaJackpots machine offerings to keep the product line fresh and exciting," says Ed Rogich, vice president of marketing. "But we've also got a very strong lineup of standard games, which are sold outright, to show off this year."

Among those are such creative titles as **Mucho Dinero**, **Magic Mirror**, **Triple Double Five Times Pay**, **Totally Puzzled**, **Happy Camper**, **Hexbreaker**, **Antique Appraisal**, **Phone Tag** and **Buffet Mania**.

M*A*S*H

VIDEO SLOTS

HAPPY CAMPER



In addition, a new multigame video poker machine will debut: **Spin and Hold** will combine Action Gaming video poker technology with proven IGT slot themes like Wild Cherry, Little Green Men and Double Diamond. In this hybrid, players wager as they would on a Triple Play Draw Poker game and get a bonus spin. When they've seen the result of the spin, they can "hold" symbols as in a video poker game and then choose to respin to improve the outcome of their "hand."

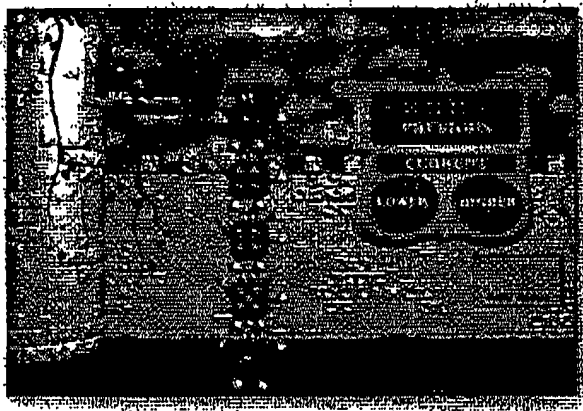
Mikohn

It can be said that Mikohn truly revolutionized slot play with its development of strategy-based bonus games, such as those seen in the company's Yahtzee and Battleship slots, and with the first knowledge-based slot, Ripley's Believe It or Not! Adventures in Trivia.

This year, Mikohn is following it up with **Ripley's Believe It or Not! Treasures of the World**. Here, players will find even more intriguing trivia, which will directly affect how much they win. In addition, a highly interactive "Treasures of the World" feature allows players to venture from continent to continent in search of a treasure worth 7,000 times their bet!

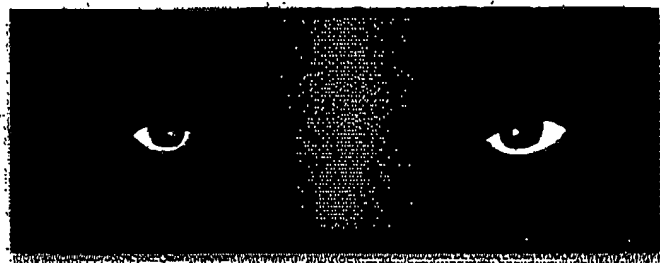
The company is also taking the trivia genre to the limit with **Trivial Pursuit Easy As Pie**. Players can customize the game to their favorite category, not only with on-screen graphics, but with overall presentation. The primary "Easy As Pie" bonus offers generous multipliers and a random selection of category, after which the player attempts to answer a multiple-choice question. A secondary "Favorite Trivia" bonus lets the player choose his favorite category.

Meanwhile, from the popular Yahtzee series comes **Yahtzee Looking For Love**, in which Mr. Pips, the colorful die character,



meets his counterpart, Ms. Pips. The object of the primary bonus rounds is to successfully connect the two. If the player is successful in hooking up the couple, the "Honeymoon Bonus" is awarded. Another new twist has been added to Yahtzee: the Ones are wild, substituting for any other die value.

Finally, the company is unveiling **Wink's Survey of America**, another knowledge-based slot. Venerable game show icon Wink Martindale serves as host. For the development of the game, "actual" Americans were asked survey questions. The slot player is taken into a game show experience, where they have the opportunity to answer real survey questions and see how their answers compare to those of America at large. Generous awards await the player who "thinks like an American."



Shuffle Master

The big buzz at Shuffle Master is **Budweiser**. The manufacturer has secured the license to all things Bud, and the result is a slot that is truly a reflection of American pop culture.

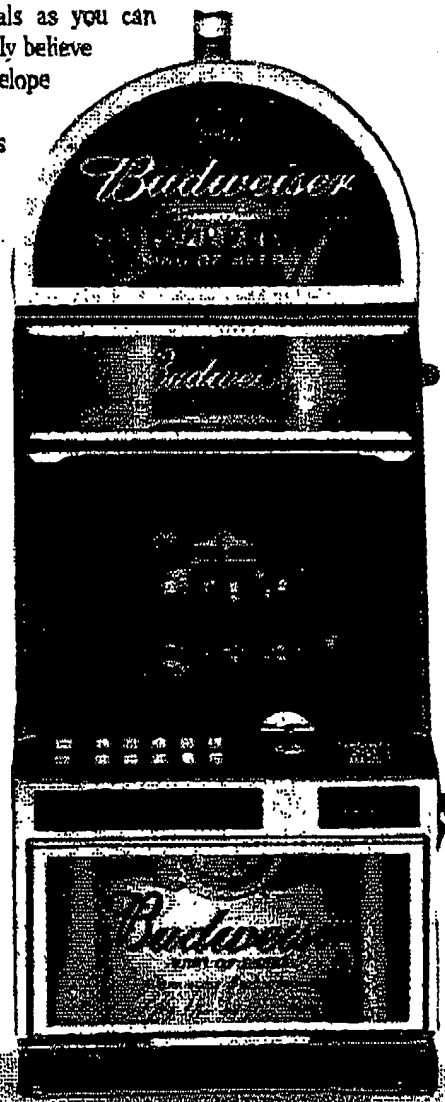
"It features the great icons of Budweiser," says Senior Vice President Brooke Dunn, "including the infamous frogs, 'Bud,' 'Weis,' and 'Er,' and 'Frank' and 'Louie,' the two lizards. We have the comedy of Frank and Louie in it. We recorded the actual characters who play Frank and Louie in the commercials and we had them do voiceovers for the slot machine."

"The graphics that we've used are state-of-the-art and they are as close to an exact duplicate of the swamp scenes in the commercials as you can possibly get. We really, truly believe that we've pushed the envelope of graphics to the max."

But the presentation is going to be equally as stunning, according to Dunn. "The big thing is, we're putting the game into a nine-foot bottle. So the game cabinet is an exact replica of a Budweiser bottle. Casinos will be putting in six-packs and twelve-packs of these games, with these huge bottles. They're just stunning."

That's not all Shuffle Master is doing. The company also has licensed all 3,500 characters in the Marvel Comics series. The first slot to be based on a comic book hero will be **Spiderman**. It will be followed up with **The Incredible Hulk**.

"It's all done in a comic book-type of arena," says Dunn. "In other words, they speak with the bubbles. It's a match of a comic book."



48347.013

Docket No. 1482/198(b)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re: Patent Application of
Olaf Vancura

Serial No.: 09/875,753

Filed: June 6, 2001

For: KNOWLEDGE-BASED CASINO
GAME AND METHOD THEREFOR

Group Art Unit: 3711

Examiner: William M. Pierce

ASSOCIATE POWER OF ATTORNEYHonorable Commissioner for
Patents and Trademarks
Washington, D.C. 20231

Dear Sir:

Please recognize Arthur J. Steiner (Registration No. 26,106), whose post office address is 600 13th Street, N.W., Washington, D.C. 20005-3096, as associate attorney in the above-identified application, with full power to prosecute the application, to make alterations and amendments therein, and to transact all business in the United States Patent Office connected therewith.

Please continue to address all communications to the undersigned.

Respectfully submitted,

DORR, CARSON, SLOAN & BIRNEY, P.C.

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